

COUNTY OF LOUDOUN
DEPARTMENT OF PLANNING
MEMORANDUM

DATE: November 13, 2008
TO: Loudoun County Planning Commission
FROM: Michael Elabarger, Project Manager
SUBJECT: November 19, 2008 Committee of the Whole
SPEX 2007-0048
Springdale Montessori School

BACKGROUND

Benny and Mary Jane Nordahl of Purcellville, VA have submitted an application for a special exception to permit a private school and child care center in the AR-1 (Agricultural Rural-1) zoning district in order to establish a Montessori school serving up to 117 students utilizing the property's existing structures for classrooms. The property is located partially within the FOD (Floodplain Overlay District), and is also located in the HCC (Goose Creek Historic and Cultural Conservation District). This application is subject to the Revised 1993 Zoning Ordinance and the proposed uses are listed as Special Exception uses in Table 2-102 under Section 2-102. The property is approximately 5.9 acres in size and is located on the east side of Lincoln Road (Route 722), 0.1 mile south of Chappelle Hill Road (Route 709), at 18348 Lincoln Road, Purcellville, VA. The property is governed by the policies of the Revised General Plan (Rural Policy Area), which designate this area for rural economy uses and limited residential development, and a small portion of the property also lies within the Existing Village of Lincoln. The Property was previously approved for a school (SPEX 1986-0009) and country inn (SPEX 1986-0049) in 1987.

The applicant's desire to establish a Montessori School as described meets the definition of two defined uses of the Zoning Ordinance – school and child care center. The portion of the proposed facility dedicated to the care of children in kindergarten and younger is defined as a child care center. Further, the portion of the proposed facility dedicated to children in kindergarten and elementary school grades is defined as a school. For the purposes of this legislative application, the applicant has designated a maximum of sixty (60) children for the child care center use, and a maximum of fifty-seven (57) children for the school use.

PLANNING COMMISSION PUBLIC HEARING

The Planning Commission held a public hearing on this application on September 18, 2008, where three (3) persons spoke in favor, or with no opinion, of the application, and fifty-one (51) speakers spoke against the application. The Planning Commission voted 7-0-2 (Commissioners Brodrick and Klancher absent) to forward the application to a Committee of the Whole meeting (held October 23, 2008) for further discussion.

PLANNING COMMISSION COMMITTEE OF THE WHOLE (10-23-08)

At this work session, Staff and the applicant responded to further questions from the Commission as discussion centered on transportation and the applicants' traffic study, staff review of the application against the Revised General Plan, and some specific zoning related matters. The applicants' transportation consultant did a brief presentation describing the methodology and general findings of the traffic study, and showed video footage of traffic occurring near the subject site and in the village of Lincoln. Extensive discussion occurred regarding the on-site circulation of vehicles, and the applicant was asked to come back to the next work session with a revised circulation plan that was safe and efficient and would meet requirements of the County Building and Development and Fire and Rescue Departments.

STATUS

** The Commission should bring their materials from the previous meeting. Discussion will continue with (IV. School Operations; V. Site-Existing Conditions; VI. Others), which is included in this staff report as Attachments (2.) and (3.). ***

The Conditions of Approval (dated November 13, 2008) have been revised and updated since the last meeting; the applicant is not in total agreement with these conditions, and Staff, the applicant, and Commission should discuss these and come to consensus if the Commission forwards this application to the Board with an approval recommendation.

County staff from Zoning Administration, Office of Transportation Services, County Health Department, Fire, Rescue, and Emergency Management, and Building and Development has been requested to attend the Committee meeting to answer questions.

UPDATES

REVISED CIRCULATION EXHIBIT

The applicant submitted a revised circulation exhibit dated November 6, 2008, which is attached to this staff report. The three parking spaces nearest Lincoln Road, which were not looked upon favorably by the Commission or Staff, have been removed. The driveway now maintains a 20' unencumbered width from the entry apron at Lincoln Road to the parking lot, which was encouraged by the Commission. The three¹ required pick-up/drop-off spaces are provided next to but not within the driveway, near the steps to the main building. A one-way (counter clock-wise) turn-around circle, with a minimum 18' width, is located between the house and the two-car garage, and within the minor floodplain area. The handicapped space is close to the main building and adjacent the turn-around circle. A 4' wide walkway on the outside (east) of the turn-around circle provides pedestrian access from the parking lot to the house without crossing the driveway between the new turn-around and Lincoln Road. With all these revisions, the proposed playground area has been reduced in size, to 8,050 square feet. The new location of a proposed fence is shown on the exhibit, which pulls the playground area further from the northern property boundary and the residential use on that adjacent parcel.

¹ With the revision of the application designating 60 students to the child care center use, the required pick-up/drop-off spaces per Zoning Ordinance Section 5-609(B)(2)(b) is reduced to three (3).

The redesign accomplished many of the objectives of the Commission, but introduces a substantial disturbance in the minor floodplain. It should be noted, in Section 4-1504(B), page 4-185, of the Zoning Ordinance, that the mapped boundaries/elevations of floodplains used by the County are approximate, and that they may be adjusted by the Zoning Administrator, in consultation with the Director of Building and Development, based on engineering studies.

Zoning Administration considers this turn-around area an extension of the driveway ('private drive'), which is permitted in a minor floodplain per Zoning Ordinance Section 4-1505(A)(5), page 4-187. The applicant has noted on the exhibit, in Note (2.), that waivers of the Facilities Standards Manual (FSM) may be required to implement the design. Building and Development confirms the applicant's note, particularly related to a floodplain study and floodplain alteration. The applicant, by developing in the minor floodplain, would need to demonstrate that any fill introduced does not increase flooding on the other side of the channel or cause a back-up of water upstream of the disturbance location.

Section 1.200(A) of the FSM describes how a waiver of the FSM is permitted:

The Director [of Building and Development] may allow for variations of given standards where the effect of such variation is in keeping with established engineering practices and procedures and shall make the final decision on all questions regarding interpretation of this manual, after reviewing recommendations from the designated departments, authorities, boards, and committees.

Decisions on waiver requests of the FSM are done during the site plan review process, and cannot be determined at this time. Staff will be prepared to speak to this new exhibit at the work session.

PARKING CALCULATIONS

See Attachment A-4, question (9.), for recalculations of the parking requirements.

WELL AND SEPTIC

See Attachment A-2, question (V.)(7.), which contains an updated response from Staff. Attachment A-6 contains documentation provided from the County Health Department.

INTENSITY OF USE

In the work session item dated October 23, 2008, staff provided an analysis of material submitted by the Citizen's to Preserve Lincoln Community (CPLC) regarding intensity of use. The CPLC material drew a correlation between limit on the number of rooms or users permitted with several rural economy uses, including bed and breakfast, and the maximum number of people per acre. Staff in reviewing the material miscalculated by mixing two different types of bed and breakfast uses (Level I and Level II bed and breakfast uses have different room limits and acreage requirements). Staff retracts its earlier assessment and would recommend that any questions about the intensity of use calculation be directed to the CPLC.

As the Zoning Ordinance does not use people per acre as a measure of intensity for schools and daycares, the Commission and Board may choose the appropriate means of measuring and limiting the project to mitigate impacts.

STAFF RECOMMENDATION

Staff recommends the application be forwarded to the Board of Supervisors with a recommendation of approval based on the findings below and the attached conditions of approval provided by Staff, or otherwise revised by the Commission.

FINDINGS FOR APPROVAL

1. The proposed Special Exception uses – school and child care center - are consistent with the planned land use policies of the Revised General Plan.
2. The proposed Special Exception uses – school and child care center - subject to conditions of approval, comply with the applicable requirements of the Revised 1993 Zoning Ordinance.
3. A school and child care center will have a positive impact on the County's economy and provide a private educational option for County residents.
4. The proposed Special Exception uses – school and child care center - will retain the historic character of the property, the Village of Lincoln, and Lincoln Road.
5. The proposed Special Exception uses – school and child care center – will adaptively re-use an historic structure and property that has historically been a school.
6. The proposed Special Exception uses – school and child care center – will provide sufficient improvements to address traffic impacts.

MOTIONS

1. I move that the Planning Commission continue discussion of SPEX 2007-0048, Springdale Montessori School, at a future Committee of the Whole meeting.

OR,

2. I move that the Planning Commission forward SPEX 2007-0048, Springdale Montessori School, to the Board of Supervisors with a recommendation of approval, based on the attached conditions of approval dated November 13, 2008.

OR,

3. I move that the Planning Commission continue forward SPEX 2007-0048, Springdale Montessori School, to the Board of Supervisors with a recommendation of denial.

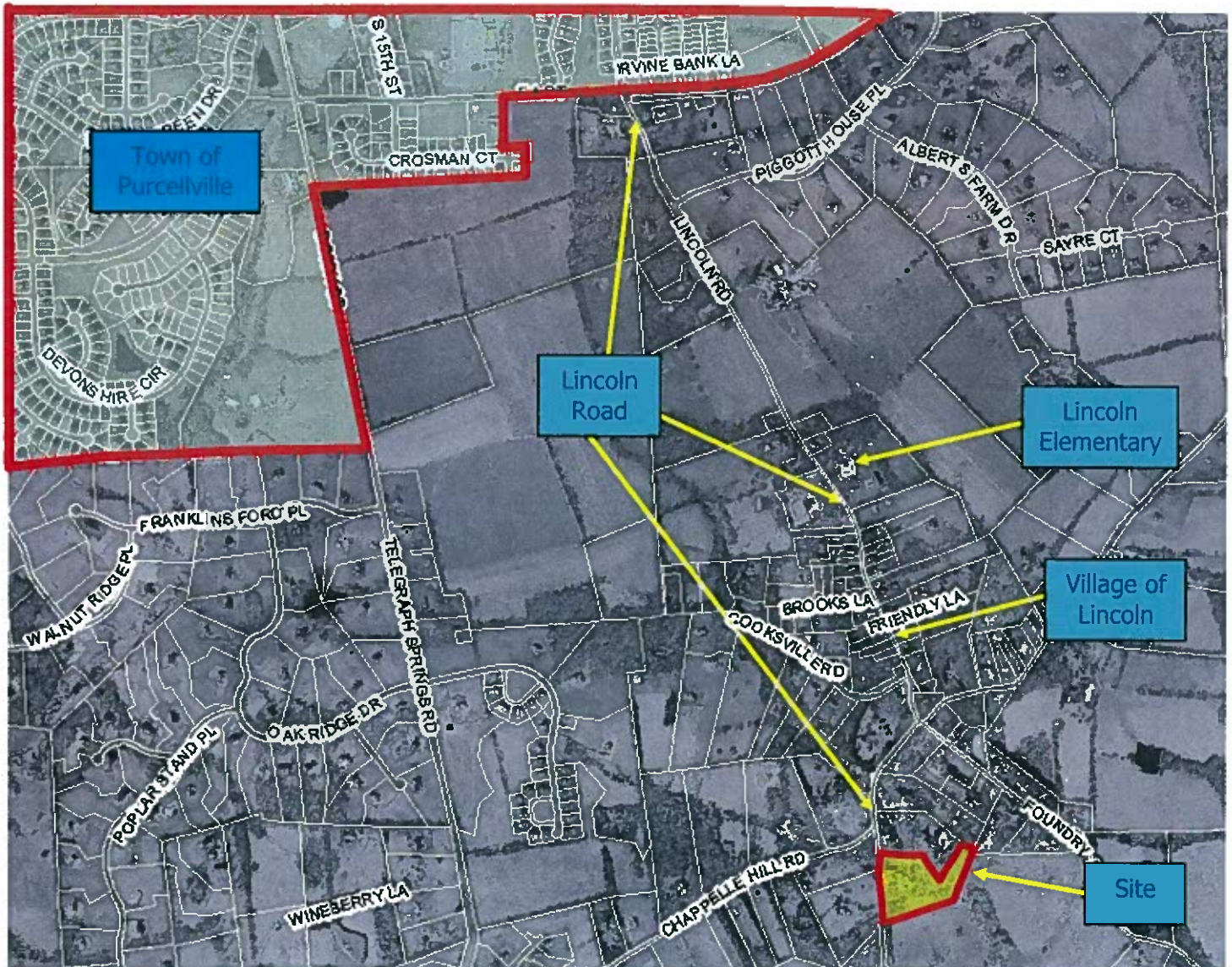
Attachments:

- A-1. Vicinity Map
 - A-2. Remaining STAFF responses to Commission Comments/Questions (IV., V., VI.)
 - A-3. Remaining APPLICANT responses to Commission Comments/Questions (IV., V., VI.)
 - A-4. Staff Response to Comments/Questions asked at 10/23/08 work session
 - A-5. Virginia Department of Transportation, referral dated June 13, 2008
 - A-6. Supporting materials regarding well and septic; see Attachment A-2, page A-2.3
 - A-7. Conditions of Approval, dated November 13, 2008
 - A-8. Applicant Submission Letter, Parking Calculation information, dated November 13, 2008
- Applicant Submission, Circulation Exhibit, dated November 6, 2008
(Electronic copies available from the Planning Department)

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ATTACHMENT A-1.

VICINITY MAP



Directions:

From Leesburg, take Harry Byrd Highway (Route 7) west to the Exit with Route 287. Proceed south on Berlin Turnpike (Route 287), then west on Business Route 7 (East Main Street). Turn left onto Maple Avenue (Route 722), which becomes Lincoln Road. Pass through the Village of Lincoln, and the property is approximately a quarter of a mile (0.25) on the east (left) side of Lincoln Road after crossing the second one-lane bridge.

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ATTACHMENT A-2.

(This is the remaining STAFF responses to Commission questions/comments, which were contained in the previous work session packet, and are provided here for ease of use during the session. The same is done for the APPLICANT responses in Attachment A-3.)

IV. SCHOOL OPERATIONS

1. Describe how drop-off and pick-up times will physically occur on the site? **(Applicant)**
2. Describe how – and how many – children will be staggered and enrolled in the Morning enrichment programs I, II, and III; Primary I and II; Elementary 1; Afternoon enrichment programs I and II; and Late afternoon enrichment program. Note how siblings or carpools of different aged children would work. **(Applicant)**
3. Describe the year-round use of the property as a child care center/school. **(Applicant)**

Per Conditions (5.) and (6.), the use of the property as a school and/or child care center shall occur for not more than 46 consecutive weeks each year, beginning with the first full week of September (where Monday is not a holiday) and concluding with the last full week in July. For the 2008/2009 school calendar year, this schedule would have begun with Monday, September 8th and would conclude with Friday, July 24th.
4. Describe applicant's Montessori Certification, experience/history with operating a school, and their role once the child care center/school is operating. **(Applicant)**
5. Provide detail on anticipated opening date, food service, odor mitigation, trash disposal, and snow removal. **(Applicant)**
6. Is Springdale Montessori a for-profit or non-profit venture? **(Applicant)**
7. Describe how many, when, and for how long students will be outside, where outside they will go, and whether a noise study was conducted to measure the impacts of these students? **(Applicant/Staff)**

The applicant will address the details of this questions; no noise study was submitted as part of this application. The Commission may include conditions of approval that limit the amount of students involved in, and the number, time, location, and duration of, outdoor activities. Noise anticipated from the playground is not regulated by the Zoning Ordinance, as it is not a stationary noise source (i.e.: a generator). The applicant has made no mention of amplified noise, such as that coming from a public address (PA) system, in the application. Such a noise source is regulated by the Zoning Ordinance, where a stationary noise source (specifically categorized as continuous noise) must not exceed 55 dBA at the property boundary with any residential use. Zoning Administration's Enforcement Division would investigate complaints regarding decibel levels.

8. Describe and fully detail any and all activities on the property outside the usual daily operation of child care center and school (ie, open house/parents night, graduation, parties, picnics, etc.) **(Applicant)**

The applicant will address this question. The Commission may create conditions to regulate the time, place, extent, etc. of such events, or prohibit them altogether.

V. SITE – EXISTING CONDITIONS

1. Describe the history of flooding on the property; whether children will be outside the fenced-in playground area; the safeguards of keeping children from the streams on the property; fence height. **(Applicant)**
2. Describe how entire house will be utilized on the interior. Will there be a separated residence there? **(Applicant)**
3. Describe how the barn will be used, the extent of renovations that would occur, the necessary permits/approvals needed to allow the barn to be occupied, safety of occupying the barn in relation to Lincoln Road. **(Staff, Applicant)**

The applicant will explain their planned use and renovations to the existing barn. If the requested Special Exception is approved, or if the applicant would choose to utilize the barn with a 'by-right' use, a site plan (STPL) and construction plans and profiles (CPAP) would be ministerially reviewed by the County. In order to renovate the barn, the applicant would need to apply for and receive some or all of the following permits from County Department of Building & Development or other County agencies: Health Permit (if property is served by well or septic, or for food service facilities); Zoning Permit; Building Permit; Electrical Permit; Gas Permit; Plumbing Permit; Mechanical Permit; Occupancy Permit (new construction only); Grading Permit; Fire Suppression Permit; Soils Report.

If any exterior alterations were to be made, for non-agricultural purposes, the applicant would need to file an application for review of those alterations with the County's Historic District Review Committee (HDRC) in order to receive a "Certificate of Appropriateness" (CAPP).

4. Describe the market study that shows demand for these uses. Where do they come from? **(Applicant)**
5. Were effects on the stream from the parking lot analyzed; what materials are being suggested, pervious or impervious? **(Applicant, Staff)**

The applicant will address this question; no specifics of improvements to the parking lot are provided in the applicant's submissions. It's been determined that the parking lot may continue to be used as is, utilizing the area that currently is graveled and as delineated on the plat associated with SPEX 1986-0009/SPEX 1986-0049. Section 5-1400 of the Zoning Ordinance requires certain landscaping, buffering, and screening,

which the applicant has stated will be addressed and provided at the time of site plan review. Requirements of the Facilities Standards Manual (FSM) may also be enforced at the time of site plan review. The Commission may craft a condition of approval to this effect, or other further restrictions.

6. Describe the status and operation of geo-thermal heating on the property. **(Applicant)**
7. Describe the County review of septic and water capacities regarding the expected daily use of the proposed uses. **(Applicant, Staff)**

The applicant can provide the Commission detail on the existing well and septic system and answer any questions.

Additional documentation was obtained from the County Health Department regarding the well and septic system on the Springdale property, and is included in Attachment A-6. This material includes letters and documents dating from September, 1986 to November, 2008.

Regarding the well:

- Page A-6.13, from the State Office of Drinking Water, states that the well yield is 50 gallons per minute (gpm) based on a 2.5 hour test documented on the well completion statement.
- Page A-6.14, the well pump capacity equals 21,600 gallons per day (gpd), and the treatment capacity is 14,400 gpd.
- Page A-6.14 states the daily demand of the proposed use, based on 118 students and 15 staff (133 persons total), and a 10 gpd per person consumption, would equate to a demand of 1,330 gpd. This amount is approximately 10% of the above noted treatment capacity of the well.

This documentation establishes that during the design, construction, and subsequent review of this existing well, the capacity is sufficient to serve the needs of this application.

Regarding the septic system:

- Page A-6.8 notes a weekly limit of 12,215 gallons can easily be adhered to by the then proposed uses for the property.
- Page A-6.9, a Sewage Disposal System Construction Permit, dated 4-20-89, lists the actual or estimated water use as 12,215 gallons per week.
- Page A-6.11, from the County Health Department, notes the design capacity is 12,215 gallons per week. On the side of this page are calculations of 118 students x 10 gpd = 1,180 gpd, and the 1,180 gpd x 7 (days a week) = 9,260 gallons per week.
- Page A-6.17 notes the criteria requirement for sewage flows for "schools without showers and with or without cafeteria is 10 gpd". The County School District has previously noted that their actual usage (ie, sewage flows) is approximately 5 gpd per elementary student.

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This documentation establishes that during the design, construction, and subsequent review of this existing septic system, the capacity is sufficient to serve the needs of this application.

VI. OTHER

1. Describe and detail any community meetings that were held – when, who attended, matters discussed, outcomes. **(Applicant)**

2. Status of possible missing VDOT referral. **(Staff)**

The last referral was dated June 13, 2008; all comments were resolved. See Attachment (6.).

3. Compare all facets of the proposed Montessori school to Lincoln Elementary school, based on 117 students. **(Staff)**

	Lincoln Elementary	Springdale
Number of Students	147 (Fall 2008)	117 maximum proposed
Number of Employees	32 *	6
Parcel Size	9.5 acres	5.9 acres
Square Footage (interior)	Not available	House-6,592 sf / Barn-1,749 sf
Playground area	Not available	13,705 sf
Parking Spaces	33	28
Drop-off/pick-up area	In front of building	4 spaces proposed
Designated Bus lane	Yes	---
Delivery area	Yes	Loading space near building
No. of Classrooms	10	Undetermined
No. of Offices	2	Undetermined
Other Rooms	3	Undetermined
Kitchen Staff	4	---
Student Bathrooms	4 (10 toilets, 4 urinals)	Undetermined
Operational Hours	7:50 a.m. – 2:35 p.m.	7:30 a.m. – 5:30 p.m.
Afterschool Activities	Vary	Until 5:30 p.m.
Summer Programs	No	Yes; 6 weeks June-July

* - Derived from the School website staff list.

4. Provide information/background on Siena Academy (St. Catherine's Catholic Church, Great Falls), a Montessori school on a 2-lane road near a one-lane bridge. **(Staff)**

The Siena Academy received a "special permit amendment" in 2004 to operate a nursery school (ages 2.5 – 6) and private school (grades 1-8) in an existing space associated with an existing church with more than adequate parking capacity. Conditions included: 150 maximum students; a 4,200 sf play area with 4' fence; operating hours 8:30 a.m. – 3:30 p.m. Monday – Friday; maximum 25 employees; no summer programs. Staff can provide staff report material upon request.

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The one-lane bridge on Springvale Road is approximately one-half mile west of the church; it is a wooden structure, approximately 15' wide and 20' in length, and has dual guardrails on the bridge itself and approaches from each direction. Further information regarding the one-lane bridge was requested from contacts at Virginia Department of Transportation and is forthcoming.

5. Provide RGP definitions of "rural character" and "village". **(Staff)**

The Plan does not define "rural character" or "village" in the Glossary. The Commission is directed to Chapter 10, page 10-1, where the existing villages of the County are described and policies for preserving and furthering the intents of villages are extolled. As previously mentioned, the existing historic structures on the site are proposed only to be renovated with minor additions, under the review and approval of the HDRC, with no new structures or buildings.

6. Provide Fire/Rescue service provider and response time. **(Staff)**

The new County Public Safety Center planned to open in January of 2009 in the Town of Purcellville would be the first responder to this property, with a time of 7:57.

7. Provide all background on the denied SPEX 1998-0026 Community Montessori (Sterling) school application.
(See binders from Citizen's to Preserve Lincoln Community, Volume 3, first tab)

8. Provide a flow chart of how a child care center/school is established. **(Staff)**

The applicant has not provided Staff information regarding how a Montessori school gets developed with regards to the State Department of Education, Montessori school standards and regulations (if they exist), or any regulatory process beyond the County land use and development permitting stage. Please see question (V.)(3.) above regarding the barn for possible County review processes.

9. Describe how lighting on the property will be provided in accordance with FSM Section 7.110(C) – site lighting for a commercial use serving the public after 5:00 pm. None has been specifically indicated. **(Applicant)**

The applicant will address this question. Condition (17.) commits the applicant to meeting the requirements of the FSM, which are reviewed during the site plan process.

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**SPRINGDALE MONTESSORI SCHOOL
SPECIAL EXCEPTION 2007-0048
APPLICANTS' RESPONSES TO PLANNING COMMISSION
AND PUBLIC HEARING ISSUES
October 16, 2008**

I. TRANSPORTATION/TRAFFIC STUDY

1. Traffic Study/analysis:

(Applicant)

- a. Compare 117 students per "private school" versus the student breakdown of 90 "day care center" and 27 "private school".

The planned maximum enrollment for Springdale School is 117 students, ranging in age from 3 to age 9. These ages include two years of preschool and grades K-3. The County Zoning Ordinance treats preschool as daycare. It is anticipated that there will be approximately 30 children in kindergarten when the school achieves full enrollment in three to five years. Under the Ordinance, kindergarten is treated as either day care or school. Although kindergarten is more appropriately a school grade, the Applicants included their kindergarten as daycare. Because the parking requirements for day care are greater than school, this puts a greater demand for parking on Springdale. For school planning and curriculum planning, and traffic planning, it does not make any difference how the kindergarten class is grouped. See Table A, Site Trip Generation Analysis prepared by Wells and Associates attached hereto.

- b. Detail the inputs and outcome of stacking analysis, Exhibit A, and why the applicant states that no problems are expected.

Additional widening is proposed for Lincoln Road at the site entrance and is shown on the plans. The widening provides additional space for southbound left turning vehicles into the site when gaps in northbound traffic occurs. The space provided will allow northbound vehicles to proceed past the entrance before the yield condition occurs at the one lane bridge. VDOT requested that three southbound vehicles should be able to stack to allow a potential northbound traveling vehicle to pass prior to the yield, one lane bridge condition. The VDOT requirement was a conservative estimate based on engineering judgment although the analysis indicated this condition is not expected.

(Wells & Associates)

- c. Explain assumption that 40% of traffic will approach from the south.

This was an estimate provided by the applicant. However, further traffic analysis has been completed based on a worse case condition to include 1) a 90/10 split with 90% coming from the north and 10% from the south, and 2) all 117 students arriving at the same time in single occupant vehicle (SOV) as opposed to some carpooling and contrary to standard Institute of Transportation Engineers (ITE) published data. The analysis showed the intersection would still operate at levels of service (LOS) "B" or better during the peak hours.

(Wells & Associates)

- d. Explain assumption that kids will leave at 3:30 and not during rush hour, when applicant states that pick-up of Primary 2, Elementary 1, Afternoon Enrichment Program I and II, and Late Afternoon Enrichment Program will occur between 3:30 and 5:30 p.m. Pick up times are staggered in the afternoon. Thirty (30) children will be picked up at 12:30 pm. Eighty-seven (87) children will be picked up between 3:30 pm-6:00 pm (Lincoln Road peak hours from 4:00-5:00 pm). Please refer to 'Springdale Montessori School Arrival & Departure Schedule' for detailed information, a copy of which is attached.

The traffic analysis assumes the maximum potential trip generation for the site, known as the "peak hour of the generator", which typically does not coincide with the peak commuter hours.) These trips were then applied to the commuter PM peak hour although the departure times are expected to occur prior to this time period. (Wells & Associates)

- e. Describe the movement, stacking, and turn-around for vehicles on the site during periods of drop-off and pick-up.
See Response b. above. Also, see Circulation Exhibit prepared by Huntley Nyce, Associates. (Wells & Associates)
- f. Impacts on the village of Lincoln.
VDOT Traffic Volume Estimates (2007) indicates that Lincoln Road carries 3,800 average daily trips (ADT) per day north of Foundry Road. Using the highest potential trips per day shown on the supplemental trip generation Table A (i.e., site trips with school + day care use) and an 80 percent north-south distribution of site trips, approximately 377 site trips per day ($471 \text{ vpd} * .80 = 377$) are estimated to be added to this portion of Lincoln Road. This estimate does not account for those trips that are already on the road system and "drop-off" students on the way to work or other trip making activities. Based on these estimates, the project would account for roughly 9% of the total existing trips. The County has established a documented 15% level of site trips as meeting the requirement for further study (i.e., impact or study area). Given the relatively low volume found at the site entrance and the high level of service shown with a future, conservative analyzed condition, it is anticipated that the County standard of LOS "D" or better would still be met within the Village. (Wells & Associates)

2. Safety issues:

Describe the safety and history of flooding of the nearest one-lane bridge.

The Applicants have owned the property since 2005. They have not witnessed any flooding of the bridge or road during the period of their ownership during which there were several very heavy rain storms.

The Applicants and Mr. & Mrs. Fones, prior owners of Springdale, are not aware of the one-lane bridge ever being flooded. The height is 8 feet over the normal water level so it is not likely

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that it would flood even under extreme conditions. It is also not likely that water could collect on the bridge, as there is a run off into the creek. According to VDOT the bridge is inspected annually and is in satisfactory condition. (Applicant, Staff)

- a. Lincoln Traffic Calming project (see Citizen's to Preserve Lincoln Community submission, Volume 1) – how has this project been incorporated into analysis of this application? The Applicants support the Traffic Calming Project and believe that Springdale School is compatible with the project. The school entrance, new signage and the existing one lane bridge to the south of the Village should help slow approaching traffic in preparation for entrance into the Village. (Applicant)
- b. Will guard-railing be installed along the Springdale property? (Staff)
- c. Existing conditions of Lincoln Road? Accident data near Springdale. According to the Sheriff's office Lincoln Road is relatively safe with fewer accidents than comparable roads such as Snickersville TPK and Silcott Springs Road. A table showing the number of accidents on Lincoln Road is attached. (Applicant, Staff)
- d. Detail how emergency vehicle access is being provided; confer with County Department of Fire, Rescue, and Emergency Management. Lieutenant Jeff Johnson and his crew of about five people visited Springdale on October 9, 2008 and met with Mr. and Mrs. Nordahl. It was agreed that the Applicants would provide enough width on the driveway and entrance (18 feet) to accommodate fire and rescue equipment ample movement. (Applicant, Staff)

II. ZONING

1. When did the school use per SPEX 1986-0009 cease to operate? The Applicants were not part of the operation of the prior owner's business. They are not able to answer this question. (Applicant)
2. Current state of exercising the country inn use per SPEX 1986-0049? Springdale is not currently operating as a Country Inn. (Staff)
3. Describe how/why parking is allowed in the minor floodplain. (Staff)
4. Describe how future site plan review/approval and review and permitting by County or State agencies relate to the review of this Special Exception (Staff)

5. Describe how/if applicant could request more students or different numbers of students per use.
(Staff)
6. How does County define one student?
(Staff)
7. Describe enforceability of drop-off and pick-up times.
The last allowed pick-up is 6:00 pm. See Springdale Montessori School arrival & departure schedule. Springdale Montessori School will implement penalty fees after 6:00 pm. (Staff)
8. Describe how the student numbers came about.
The number of students is the result of a carefully conducted assessment of what is required in order to be able to offer a diverse and rich curriculum, quality teachers and a scale that is in harmony with the buildings, grounds, infrastructure and community, while meeting or exceeding all county and state codes and regulations. (Staff, Applicant)
9. Address the phrase "intensity of use factor" stated by members of the public; is it adaptable to the proposed uses?

The proposed use is well within what is allowed by special exception. The Rural policy states that the county supports a variety of opportunities for activities that preserve the rural character and are compatible with the dominant land use pattern in the Rural Policy Area. Appropriate use includes Private Schools. Where possible, it states, such uses should locate in existing historic and/or agricultural structures.

Springdale is located outside of the village, and thus is not regulated by village rules. However, the village of Lincoln does already have a fair amount of non-residential activities. These includes;

1. Lincoln Elementary School a 12,277 square foot building with 147 students and 32 employees on 9.75 acres, which equals 18 people/acre.
2. Lincoln Studios with 11 offices servicing a variety of businesses and one studio on 0.56 acres. Assuming one person/office and one for the studio, it equals 21 people/acre. They have 5 parking spaces, which equals 9/acre. (The proposed use for Springdale would equal 21 people/acre and less than 5 parking spaces/acre)
3. Breakthrough Inc. with 6 employees and 6 parking spaces on 0.3 acres. That is equivalent to 20 employees and 20 parking spaces/acre
4. Lincoln Store with a Post Office, one store and 4 parking spaces on 0.25 acres.
5. The Abernathy & Spencer Nursery with numerous employees and approximately 12 parking spaces
6. The Goose Creek Meeting House with a parking lot for approximately 20 cars
7. Clint Good Architects
8. Atex Consulting

9. Grace Methodist Episcopal Church
10. The historic Quaker meeting house

According to the four traffic studies conducted by Wells & Associates, the actual daily traffic on Route 722 is approximately 1,500 cars per day. According to the 2007 VDOT analysis, the traffic in the village is 3,800 per day. The school would add less than 9% to that according to Wells & Associates. The bulk of the additional traffic would be spread out over 2 hours in the morning and 2-1/2 hours in the afternoon. See the Springdale Montessori School Arrival & Departure Schedule. (Staff, Applicant)

10. How will County Building & Development determine or verify parking (number of spaces and location) at the time of site plan, as referenced in staff referrals/report. (Staff)
11. Explain how "licensed capacity" of proposed uses will affect and determine the number of students permitted on the property, and how this affects the number of necessary (per the Zoning Ordinance) and provided (physically available on site) parking spaces. (Staff)

III. PLAN POLICIES

1. Discuss how Staff reviewed the application against: (Staff)
 - Ch. 10 – Existing villages
 - Ch. 7 – Rural Policy area
 - Regarding scale, intensity, compatibility
 - Traffic impacts on village
 - Ch. 5 – Heritage resources
 - Heritage Plan policies
2. Provide copy of Rural Policy Area (esp. Economic) policies. (Staff)
3. Describe the Historic District Review Commission (HDRC) review process for this property, and implications of their decisions. (Staff)

IV. SCHOOL OPERATIONS

There will be 3 classes held in the main building with a maximum of 90 students total. One class will be held in the barn with a maximum of 27 students. Please see schematic drawings for more details.

A-3.5

The Applicants would like to accommodate growth for the school in three phases:

1. Phase I -First year of school operation with no more than 48 students with two classrooms. Both classrooms will be in the main building.
2. Phase II- Second year of school operation there will be a classroom added in the lower level of main building.
3. Phase III- Fourth year of school operation there will be a classroom in the barn.

1. Describe how drop-off and pick-up times will physically occur on the site?
Arrival time of students has been thoughtfully considered. Arrival times will be staggered from 7:30 am -9:30 am. Please refer to the 'Springdale Montessori School Arrival & Departure Schedule' for detailed information.
(Applicant)
2. Describe how – and how many – children will be staggered and enrolled in the Morning enrichment programs I, II, and III; Primary I and II; Elementary I; Afternoon enrichment programs I and II; and Late afternoon enrichment program. Note how siblings or carpools of different aged children would work.
At the school's maximum capacity, 117 students will be staggered through out the course of 2 hours in the morning and 2-1/2 hours in the afternoon. Please refer to 'Springdale Montessori School Arrival & Departure Schedule' for detailed information.

Families who have both younger and older children will be able to choose the programs that best fit their schedule. There will be max. of 87 students who will be picked up from 3:30 pm-5:30 pm. On the positive side, families with one or more children would reaffirm the fact that 117 children do not equal 117 cars.
(Applicant)

3. Describe the year-round use of the property as a child care center/school.
Springdale Montessori School's operational hours will be from 7:30 am-6:00 pm. Regular school programs including summer enrichment program in total will run 46 weeks every school calendar year. Applicants plan to have the regular school program from beginning of September through beginning of June.

The Applicants plan to have the summer enrichment program from beginning of June through mid July.

The property will be used for a Montessori school emphasizing place based education. Part of the Main Building (north-wing) might be used as an apartment for Head of School or a Teacher. Please see schematic drawings and Special Exception Plat for more details regarding main building, barn, playground and parking.
(Applicant)

A-3.6

4. Describe applicant's Montessori Certification, experience/history with operating a school, and their role once the child care center/school is operating.

The Nordahls are not educators by profession and therefore do not hold a Montessori teacher's certification. They are members of the Association Montessori Internationale (AMI), the American Montessori Society (AMS), and the North American Montessori Teachers Association (NAMTA). They intend to pursue a Montessori school certification.

Additional information regarding the Applicants:

Benny Nordahl - Oneness Family School: International Peace Academy, Chevy Chase, Maryland. Board of Trustee, Treasurer

The Swedish School for Children, Falls Church, Virginia
Board of Trustee, Vice-Chairman

*The Swedish Children's School in Falls Church is the largest Swedish school outside of Sweden.

Jane Nordahl - Completed Part 1 of the 'Montessori Whole-School Management (SM): A Professional Development Course for Teachers and Administrators' sponsored by NAMTA (North American Montessori Teachers Association). Part 2 will take place summer '09. Upon completion of Part 2, a certificate of completion will be issued.

Both Applicants have completed Virginia Department of Social Services Division of Licensing Programs' "Child Day Center: Phase I: Pre-Application/Orientation". Phase II of this two-part course will be completed before opening school.

The Nordahls currently have Andrew Kutt, Founder and Executive Director of Oneness Family School: International Peace Academy, as their educational advisor. Mr. Kutt's Montessori school is celebrating their 20th Anniversary this year. Advise and help from other well regarded and established Montessori educators and professionals are available to them if needed.

(Applicant)

5. Provide detail on anticipated opening date, food service, odor mitigation, trash disposal, and snow removal.

Opening: The Nordahls plan to open the school Fall of 2009.

Food: Children will bring their own lunches.

Odors: No odors need to be mitigated.

Trash: The trash will be disposed by:

1. Cleaning company- will service the school and will haul away trash.

2. Waste Management- their current trash collector.

Snow Removal: Snow removal will be handled by the landscape contractor currently servicing the property, Green Acres Lawn Care of Round Hill. They are a professional company that

A-3.7

currently provides lawn and snow removal services to many commercial businesses in the town of Purcellville. (Applicant)

6. Is Springdale Montessori a for-profit or non-profit venture?

Springdale Montessori is a for-profit venture. (Applicant)

7. Describe how many, when, and for how long students will be outside, where outside they will go, and whether a noise study was conducted to measure the impacts of these students?

On a regular school day there will be no more than 30 students engaged in outside activities at one time. Springdale will follow the Commonwealth of Virginia Department of Social Services Standards for Licensed Child Day Centers, which mandates between 15-60 minutes/day of outdoor activity, depending on the length of the program. This translates into an estimated 180 minutes (3 hours) per day of outdoor activity when the school operates at full capacity of 117 students. (Applicant/Staff)

8. Describe and fully detail any and all activities on the property outside the usual daily operation of child care center and school (ie, open house/parents night, graduation, parties, picnics, etc.) The school will conduct after-school events a few times per year. They will be limited in size and duration. For example an annual picnic, parent traffic safety education and new family open houses. (Applicant)

V. SITE – EXISTING CONDITIONS

1. Describe the history of flooding on the property; whether children will be outside the fenced-in playground area, the safeguards of keeping children from the streams on the property; fence height.

Daily breaks will be limited to the designated fenced-in playground.

The only excursions outside of the play-ground area will be as part of the educational program, which means that they will be in small groups of children that are supervised at all times.

We have no knowledge of any flooding on the property. Normally there is a little water in one of the streams while the second is virtually dry. In the unusual case of extreme weather with very heavy downpour, the streams does fill up, but they do not cause flooding and they reseed quickly. We do not plan to have any outdoor activities during, or directly after heavy rainstorms. Springdale will comply with the weather policy of the Loudoun County public schools. (Applicant)

2. Describe how entire house will be utilized on the interior. Will there be a separated residence there?

The lower level, first and second level will be used as classrooms. The two rooms on the third level will be used as offices for the Head of School and the teachers. The main building's sq. ft.

A-3.8

is approximately 8,060 sq. ft. The interior modifications are very limited and will comply with all applicable Virginia and Loudoun County codes and regulations as well as with the United States Department of Interiors guidelines for rehabilitation tax credits. The Nordahls are also exploring the option of becoming LEED (Leadership in Energy and Environmental Design) certified.

The north wing of the building may serve as a residence for the Head of School, or a teacher. If so, it will be separated from the school. **(Applicant)**

3. Describe how the barn will be used, the extent of renovations that would occur, the necessary permits/approvals needed to allow the barn to be occupied, safety of occupying the barn in relation to Lincoln Road.

The barn will be used for one class room. Interior work will include a complete renovation. Exterior work will be subject to HDRC approval. **(Staff, Applicant)**

4. Describe the market study that shows demand for these uses. Where do they come from?

There are 6,764 families with children in the ages from 3 – 9 years old living within 15 miles from Springdale, there are 2,570 families with children in those ages living within 10 miles and there are 744 families within 5 miles. The area includes, Lincoln, Purcellville, Philomont, Aldie, Round Hill, Middleburg, Leesburg and many developments surrounding those towns. Before marketing and promotion has begun the school already has more than 70 interested families with over 100 children. Springdale Montessori School will have a unique location and curriculum, which is not offered by any other school in the area. **(Applicant)**

5. Were effects on the stream from the parking lot analyzed; what materials are being suggested, pervious or impervious?

It is not anticipated the parking lot will have any effect on the stream. The parking lot is planned to remain a pervious gravel surface. **(Applicant, Staff)**

6. Describe the status and operation of geo-thermal heating on the property.

The Applicants are evaluating geothermal heating. If chosen, it will comply with all applicable codes and regulations. **(Applicant)**

7. Describe the County review of septic and water capacities regarding the expected daily use of the proposed uses.

Applicants are in the process of completing compliance review for water and septic. **(Applicant, Staff)**

VI. OTHER

1. Describe and detail any community meetings that were held – when, who attended, matters discussed, outcomes.

All adjacent neighbors were invited to individual information meetings during June-July of 2007. Mr. and Mrs. Hall, Mr. and Mrs. LeSourds and Mr. Clint Good accepted the invitations and meetings were held to inform them about the plans for the school and listen to their concerns. A phone meeting was held with Mrs. Diane Cummings. A follow up meeting was held with the Halls to discuss screening issues. A meeting and several telephone conversations were held with the Chairman of the Lincoln Community League, Mr. Phil Daley. The meeting was also attended by his wife Ellie.

A well attended community meeting was held on the Property on January 27, 2008.

The Lincoln community leaders were invited to meetings to discuss the benefits to the community of Springdale. A meeting was held with Mr. Phil Daley and Mrs. Jean Brown. The rest of the invitations were declined.

An invitation for a follow up meeting to discuss how Springdale Montessori School benefits our community was sent to all adjacent neighbors on September 16, 2008. The only reply so far came from the LeSourds, who rejected the invitation and suggested a meeting focused solely on reducing the size of the school.

The outcome of the meetings held to date has been limited, most attendees have been reluctant to discuss issues other than their concerns over traffic. We have worked hard to analyze the impact on traffic and to minimize it when possible by scheduling around peak hours and by designing traffic safety routines that makes the traffic flow in and out of the school, as well as within the school grounds, safe.

(Applicant)

2. Status of possible missing VDOT referral. (Staff)
3. Compare all facets of the proposed Montessori school to Lincoln Elementary school, based on 117 students. (Staff)
4. Provide information/background on Siena Academy (St. Catherine's Catholic Church, Great Falls), a Montessori school on a 2-lane road near a one-lane bridge. (Staff)
5. Provide RGP definitions of "rural character" and "village". (Staff)
6. Provide Fire/Rescue service provider and response time. (Staff)
7. Provide all background on the denied SPEX 1998-0026 Community Montessori (Sterling) school application.

A-3.10

(See binders from Citizen's to Preserve Lincoln Community, Volume 3, first tab)

8. Provide a flow chart of how a child care center/school is established.
The Applicants with the assistance of their educational consultant, have made a preliminary determination that Springdale Montessori School can be established within the appropriate regulatory guidelines. Applicants are pursuing the approval of their school one step at a time. The first step in this process is obtaining the necessary land use approvals, including the pending special exception. After the special exception has been approved, the Applicants with the continued assistance of their educational consultant, will obtain the remaining permits and certificates from the appropriate governmental agencies to operate the school. It is anticipated that the school will be open in time for the beginning of classes in September, 2009.
(Applicant, Staff)

9. Describe how lighting on the property will be provided in accordance with FSM Section 7.110(C) – site lighting for a commercial use serving the public after 5:00 pm. None has been specifically indicated.
Minimal lighting will be provided for parking lot safety and security during operating hours when natural light is insufficient. Applicants will submit a lighting plan with its site plan and comply fully with light limitations in the Facility Standards Manual. **(Applicant)**

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ATTACHMENT A-4.

Staff Responses to Questions asked at the October 23, 2008 Commission work session.

1. **STAFF** – Provide and describe the by-right uses of the existing barn.

The barn could be used for any by-right use listed in Table 2-102 of the AR-1 district, unless there are specific requirements for that use which would preclude the use from occurring in that existing structure. An example would be an antique store, which is subject to Section 5-650, which has the following (summarized for brevity) restrictions:

- Intensity/Character: Hours of operation – 8:00 a.m. to 9:00 p.m.
- Size: Site – minimum 1 acre.
- Structures – maximum 3,000 square feet for art galleries, studios, craft shops.
- Structures – maximum 10,000 square feet for antique shops.
- Existing structure prior to 1-7-03 used for use is exempt from minimum lot area, yard and floor area ratio, if enlargement does not exceed 15% of existing floor area; larger expansion by minor special exception.
- Location on site: minimum 100' setback from all lot lines.
- Landscaping, buffer: per Section 5-653(A); parking areas: per Section 5-653(B).
- Parking: per Section 5-1102; dust-free surface per the FSM.
- Road access: per Section 5-654.
- Number of access points: maximum one to a public road, not precluding emergency vehicle only access.
- Exterior lighting: per Section 5-652(A).
- Noise: per Section 5-652(B).

2. **STAFF** – Provide information from the Loudoun County School District regarding water and septic usage of their schools.

Further information was provided by the School District:

- Data regarding the 5 gallons per student average were from the hydro-geological report on the Grubb property and from the Harmony ES-4 site.
- The range being used for elementary school is 4-8 gallons per day per student, for all elementary schools district wide. The range for high schools is 4-10 gallons per day per student, for all high schools district wide. The middle schools would be similar to the elementary school.
- Separate irrigation wells are used when possible but some schools use public water for irrigation.
- These ranges do not take into account water-saving fixtures; future usage per student would be expected to decrease as these fixtures are increasingly implemented.
- Lincoln Elementary School is on a well and septic system.

3. **STAFF** – Is the wall along the driveway subject to Historic District Review Commission (HDRC) review?

The walls on the Springdale property would be considered 'structures' by Zoning Administration. Demolition and/or relocation of the existing entrance feature elements (columns, wall, horizontal fence rails) will require a Certificate of Appropriateness (CAPP) from the HDRC. Any proposed new construction such as walls, fencing or entrance columns, will also require an approved CAPP. The existing features shown on the plat "to be removed," appear to be constructed of metal and concrete block and are therefore not contemporary with the historic house and dependencies. While staff cannot anticipate the decision of the HDRC regarding the removal or relocation of the existing features, it is likely that the design and materials proposed for any new entrance feature elements would be of greater concern to the HDRC.

4. **STAFF** – Provide the State Department of Education definition of “student”, and include that in the condition of approval setting that definition.

Per Section 22.1-1 of the Code of Virginia, a “person of school age” means a person who will have reached his fifth birthday on or before September 30 of the school year and who has not reached twenty years of age on or before August 1 of the school year.

The Loudoun County School Board policies regarding students are as follow:

STUDENTS ADMISSION AND ATTENDANCE
§8-12 Persons Entitled to Free Education

A. General

This policy covers only those students who may be entitled under state law to a free education in Loudoun County Schools. Any student who meets the age and residency requirements of state law shall be eligible for a free public education. Proof of age and residency may be required prior to admission to school, certain health requirements must be met and the student's parent, guardian, or other person having control or charge of the student must provide a sworn statement or affirmation that indicates whether the student has been expelled from his/her former school, public or private, for an offense in violation of the school board's policies relating to weapons, alcohol, or drugs, or for the willful infliction of injury to another person. This statement shall be maintained as a part of his/her scholastic record.

B. Age of Eligibility

1. Any person who will have reached five years of age on or before September 30 of the school year and who has not reached the age of twenty years on or before August 1 of the current school year is eligible for free education.
2. Disabled persons who will have reached the age of two years on or before September 30 of the school year and who have not completed a Board of Education approved secondary program or who have not reached their 22nd birthday are eligible for free education. The definition of disabled persons shall be in accordance with §22.1-213 of the Code of Virginia.

C. Residency

1. Students must be residents of Loudoun County to be eligible to attend Loudoun County Schools free of tuition charge.
2. Students under the age of eighteen years are residents if they meet one of the following requirements:
 - a. Be actually residing with a natural parent or parent by legal adoption who actually resides in Loudoun County.
 - b. If the parents are dead, be living with a person in loco parentis who actually resides in Loudoun County.
 - c. If the parents are unable to care for the student and the student is living, not solely for school purposes, with another person who resides in Loudoun County and is the court-appointed guardian or has legal custody of the student.

d. Be living in Loudoun County, not solely for school purposes, as an emancipated minor.

3. Students eighteen years of age or older may establish their own residence in Loudoun County.

The County Health Department, in their Sewage Handling and Disposal Regulations, does not define "student", but offers that, for the purposes of their permitting processes, a student would be anyone enrolled to attend a school for an education.

The language in Condition (2.) has been reworded to express the intent that one child equals one student, which has been agreed to by the applicant, and notes that no definition in a condition approved with this application could supersede or preclude how the County School Board or State defines or recognizes a student.

5. **STAFF** – Provide the distance between the barn and the steeply inclined drop-off near Lincoln Road to the south of the bridge.

The slopes toward the tributary stream to the south of the barn are variable, but appear to measure (on the applicants Special Exception plat) between approximately 75' and 165', depending on the severity of the slope. Pictures in Attachment (7.) provided in the previous work session packet provide some visual evidence of these slopes. Condition (15.) has been provided to inhibit students from these proposed uses from entering these slope areas, as well as any areas of the yard not within the designate playground area.

6. **STAFF** – Have the stormwater management impacts of an improved or expanded driveway been reviewed?

With the revised circulation exhibit, there are now disturbances in the minor floodplain which will be reviewed during the site plan review process, and waivers of particular sections of the Facilities Standards Manual (FSM) may be needed by the applicant (see page 2 of this staff report under "Revised Circulation Exhibit".) The difference in future stormwater flows from the other proposed activities on this already developed property does not appear to be great, but that will also be reviewed and addressed by Building and Development staff at the time of site plan review. The applicant has noted their intent to provide low-impact design elements in their renovations, as well as buffering plantings that would be near or adjacent the stream opposite the parking lot. Condition (18.) has been added, committing the applicant to meeting the FSM requirements regarding stormwater management at the time of site plan review.

7. **STAFF** – Have staff from the County Fire, Rescue, and Emergency Management Department attend next meeting to discuss driveway.

Maria Taylor has been requested to attend the work session.

8. **STAFF** – Ask VDOT how a guard-rail could be provided where the very steep drop-off exists on the east side of Lincoln Road at the southern end of the property.

Provision of guard rail within VDOT right-of-way is a decision to be made by, and responsibility of, VDOT. Staff will update the Commission at the work session if further information is provided by VDOT.

9. **STAFF** – Explain how parking will be provided for the now proposed 60 child care center children and 57 school students, plus faculty.

With the revision of the application designating 60 students to the child care center use and 57 students to the school use, the minimum parking requirements for the application were recalculated and are noted below. See Attachment A-8, a letter from the applicant detailing the number of employees and rooms for the school use.

- Child Care Center use – Section 5-1102/Table 5-1102, page 5-134 of the Zoning Ordinance, under 'Child Care Facilities': 0.2 spaces per person in licensed capacity plus one per employee not residing on the property. The 60 students would require 12 spaces (or 1 space per 5 students). In Attachment A-8, the applicant has stated that there will be a maximum of six (6) employees associated with this use; this would require 6 spaces. No employees residing on the property have been proposed. The total minimum number of parking spaces for the use would be 18.
- School use – Section 5-1102/Table 5-1102, page 5-136 of the Zoning Ordinance, under 'Educational': one space per classroom and other room used by students plus .2 space per student over driving age. No parking spaces are required for employees serving the school use. In Attachment A-8, the applicant has stated that there will be a four (4) rooms associated with this use, which would require 4 spaces. The total minimum number of parking spaces for the use would be 4.
- The two uses together require a minimum of 22 parking spaces.

The revised Circulation Exhibit identifies a total of twenty-six (26) parking spaces. From the numbers provided by the applicant noted above, the application is demonstrating that it can more than accommodate the minimum number of required parking spaces within the existing parking lot.

As previously noted in the Public Hearing Staff Report, the existing parking lot, which was approved under SPEX 1986-0009 and SPEX 1986-0049, can continue to be used without further approvals as long as it is not expanded or paved. As explained further in this document in Attachment A-2, question (V.)(5.), no expansion or change of surface materials of the parking lot are proposed, but some requirements of the Zoning Ordinance and Facilities Standard Manuals may be enforced at the time of site plan. Per Section 4-1505(B)(6), 5,000 square feet of parking in the minor floodplain is permitted; from the Special Exception plat, the existing parking lot measures between approximately 6,600 and 6,800 square feet.

The applicant has verbally informed staff that they will seek a waiver at the time of site plan review to not provide the loading space, which per Zoning Ordinance Section 5-1102, Table 5-1102 requires one (1) loading space per 100,000 square feet of gross floor area (GFA) for the educational (school) use. There are no loading space requirements for the child care center use.

As previously stated with regards to this application, the Zoning Ordinance regulates the 'licensed capacity' of the use, but it is the State which ultimately determines what this 'licensed capacity' is, and at that time the applicant must demonstrate they can meet the parking requirements of that number. If that licensed capacity is lower than 117, the

A-4.4

applicant can meet the parking requirements. If the licensed capacity should be greater than 117, the applicant can only serve up to 117 children per Condition (3.)

10. **STAFF** – Draft a new condition requiring landscaping of the three proposed parking spaces nearest Lincoln Road at the sites entrance.

With the revised circulation plan, these parking spaces have been removed.

11. **STAFF** – Draft a condition to limit and/or mitigate the impacts of special events should they occur on the property.

See Condition (14.) in Attachment A-7. The term "private event" is used to avoid confusion with 'special events', which are defined and regulated in the Zoning Ordinance, Section 5-500(C), in a manner not intended by Staff for this application.

12. **STAFF** - The traffic study states that the vehicle capacity (V/C) for Lincoln Road is 3200 vehicles per hour (vph) two-way volume, or a maximum of 1700 vph one-way volume. Provide comparisons of the V/C for these two-lane roads (or their applicable two lane portions): Route 15; Belmont Ridge; Berlin Turnpike; Snickersville Turnpike; Dry Mill Road.

This request will be addressed at the work session.

13. **STAFF** – Provide information regarding the discussion and decision making regarding SPEX 1986-0009 and SPEX 1986-0049.

Staff is in the process of performing a manual search into records from the Board of Supervisors review of these applications. An update will be provided at the work session.

14. **APPLICANT** – How will vehicles and access be provided for special events?

15. **APPLICANT** – Demonstrate that an in-bound que within the driveway (caused by vehicles disembarking or picking up students) will not back out onto Lincoln Road.

16. **APPLICANT** – Present a revised circulation plan, and address how vehicles will really enter and exit the property if the planned assigned drop-off and pick-up times do not work in actuality. *(See the revised Circulation Exhibit attached to this staff report)*

17. **APPLICANT** – If at 8 a.m., if all 34 cars show up, what would happen to driveway and/or Lincoln Road? IF the driveway can only hold eight (8) cars, what is the ninth car going to go if they all arrive at once?

18. **APPLICANT** – Does the handicapped parking space meet all ADA requirements?

19. **APPLICANT** – Agree to condition for an elevator to gain access to main floor of house from handicapped parking spot, or demonstrate that access can be made to the front of the house. *(See condition (16.) in Attachment A-7.)*

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

DAVID S. EKERN, P.E.
COMMISSIONER

14885 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)
June 13, 2008

Mr. Mike Elabarger **MSC#62**
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
Leesburg, Virginia 20177-7000

Re: **SPEX 2007-0048 Springdale Montessori School**
Loudoun County

Dear Mr. Elabarger:

I have reviewed the above plan as requested in your submittal dated June 9, 2008, and received on June 9, 2008. Previous comments have been addressed and I have no objection to the approval of this plan.

If you have any questions, please call me at (703)383-2424.

Sincerely,

Kevin Nelson
Transportation Engineer

cc: **Mr. Imad Salous**
spex2007-0048sa3SpringdaleMontessoriSchool6-13-08ME



ATTACHMENT A-5

A-5.1

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COMMONWEALTH OF VIRGINIA

COUNTY OF LOUDOUN

DEPARTMENT OF PUBLIC HEALTH

209 GIBSON STREET, N.W.
LEESBURG, VIRGINIA 22075



Earl E. Virts, Jr., M.D.
Director

Administration)
Nursing) 777-0236
Dental)

Environmental Health) 777-0234

MEMORANDUM TO: Tim Krawczel, Zoning Administrator

FROM: Philip B. Helm, Sanitarian, Environmental Health *PH*

SUBJECT: SE 86-09, Section 45 ((10)), Parcel 2, Roger Fones

DATE: September 5, 1986

An area of soils suitable in size to accommodate 2,100 gallons per day has been located. Mr. Fones proposes the property to include:

20 overnight guests	x 60 gallons per day =	1,200
79 day guests	x 20 gallons per day =	1,580
1 in-residence caretaker	x 75 gallons per day =	75
2 owners at residence	x 75 gallons per day =	<u>150</u>

3,005 gallons per day.

In view of the discrepancy between available site and proposed usage, Mr. Fones will propose a formal engineering study that will allow for no more than 14,700 gallons per week. It is Mr Fones' contention that the site will not be filled to capacity at all times, and that a weekly average of 14,700 gallons can easily be adhered to. Mr. Fones will propose a proven storage and dosing system to accommodate this gallonage.

Also included in the proposal will be specific information regarding water mounding and nitrate loading in the area of the sewage disposal system.

No permits will be issued from this office until the above proposal and design specifications on pump requirements and water mounding and nitrate loading proposal have been submitted and are approved by this office.

PBH/bh

ATTACHMENT A-6

A-6.1



Earl E. Virts, Jr., M.D.
Director

COMMONWEALTH OF VIRGINIA

COUNTY OF LOUDOUN

DEPARTMENT OF PUBLIC HEALTH

209 GIBSON STREET, N.W.
LEESBURG, VIRGINIA 22075



Administration)
Nursing) 777-0236
Dental)

Environmental Health) 777-0234

MEMORANDUM TO: Tim Krawczel, Zoning Administrator

FROM: Philip B. Helm, Sanitarian, Environmental Health *RA*

SUBJECT: SE 86-09, Section 45 ((10)), Parcel 2, Roger Fones

DATE: September 5, 1986

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<i>30</i> 20 70 day guests	x 20 gallons per day =	1,580
1 in-residence caretaker	x 75 gallons per day =	75
2 owners at residence	x 75 gallons per day =	<u>150</u>

~~30~~ Day School People

3,005 gallons per day.

In view of the discrepancy between available site and proposed usage, Mr. Fones will propose a formal engineering study that will allow for no more than 14,700 gallons per week. It is Mr. Fones' contention that the site will not be filled to capacity at all times, and that a weekly average of 14,700 gallons can easily be adhered to. Mr. Fones will propose a proven storage and dosing system to accommodate this gallonage.

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No permits will be issued from this office until the above proposal and design specifications on pump requirements and water mounding and nitrate loading proposal have been submitted and are approved by this office.

PBH/bh

*1200
1000
75
150
2475*

Simultaneous Spring & Fall.

A-6.2



Earl E. Virts, Jr., M.D.
Director

COMMONWEALTH OF VIRGINIA

COUNTY OF LOUDOUN

DEPARTMENT OF PUBLIC HEALTH

209 GIBSON STREET, N.W.
LEESBURG, VIRGINIA 22075



Administration)
Nursing) 777-0236
Dental)

Environmental Health) 777-0234

April 2, 1987

Roger W. Fones
1422 N. Ivanhoe Street
Arlington, Virginia 22205

Re: Section 45, part of
Parcel 75

Dear Mr. Fones:

This letter will serve as a reminder that no permits will be issued for construction of your proposed sewage disposal system until this office has received a formal engineering study that will allow no more than 14,700 gallons per week. The submittal must include adequate storage and a dosing system designed to accommodate 2,100 gallons per day. Please remember to have included in this proposal specific information regarding water mounding and nitrate loading in the area of the sewage disposal system.

No occupancy permits will be issued from the Department of Technical Services until this system has been installed, inspected, and approved by the Loudoun County Health Department and satisfactory water samples have been obtained.

The well to serve the dwelling is to be a non-community well, designed to accommodate service to the public. Prior to placement of a new well in service, it must be developed in accordance with the rules and regulations regarding non-community waterworks.

Sincerely,

Philip R. Helm
Senior Sanitarian

PBH/bh

A-6.3

WELL

Sewage Disposal System Construction Permit

PAGE 1 OF 1

Commonwealth of Virginia
Department of Health

Loudoun Health Department



Health Department
Identification Number 659 FSW 85 (well)
Map Reference 45/75

General Information

New ☒ Repair ☐ Expanded ☐ Conditional ☐ FHA ☐ VA ☐ Case No. na
Based on the application for a sewage disposal system construction permit filed in accordance with Section 3.13.01, a construction permit is hereby issued to:
Owner Roger W. Fones Telephone 241-2294
Address 1422 N. Ivanhoe Street, Arlington, VA 22205
For a Type Sewage disposal system which is to be constructed on/at Rt. 7 W, L on Rt. 722,
1st drive past int. w/709 (from R) on left
Subdivision na Section/Block 45 Lot 75
Actual or estimated water use

DESIGN

NOTE: INSPECTION RESULTS

Water supply, existing: (describe) Spring
To be installed: class II, cased and grouted to subrock +10'
cased minimum of 50' grouted minimum of 50'

Water supply location: Satisfactory yes ☐ no ☐
comments
G. W. 2 Received: yes ☐ no ☐ not applicable ☐

Building sewer:
I.D. PVC 40, or equivalent.
Slope 1.25" per 10' (minimum).
☐ Other

Building sewer: yes ☐ no ☐ comments
Satisfactory

Septic tank: Capacity gals. (minimum).
☐ Other

Pretreatment unit: yes ☐ no ☐ comments
Satisfactory

Inlet-outlet structure:
PVC 40, 4" tees or equivalent.
☐ Other

Inlet-outlet structure: yes ☐ no ☐ comments
Satisfactory

Pump and pump station:
No ☐ Yes ☐ describe and show design.
if yes:

Pump & pump station: yes ☐ no ☐ comments
Satisfactory

Gravity mains: 3" or larger I.D., minimum 6" fall per
100', 1500 lb. crush strength or equivalent.
☐ Other

Conveyance method: yes ☐ no ☐ comments
Satisfactory

Distribution box:
Precast concrete with parts.
☐ Other

Distribution box: yes ☐ no ☐ comments
Satisfactory

Header lines:
Material: 4" I.D. 1500 lb. crush strength plastic or equivalent
from distribution box to 2' into absorption trench.
Slope 2" minimum.
☐ Other

Header lines: yes ☐ no ☐ comments
Satisfactory

Percolation lines:
Gravity 4" plastic 1000 lb. per foot bearing load or
equivalent, slope 2" 4" (min. max.) per 100'.
☐ Other

Percolation lines: yes ☐ no ☐ comments
Satisfactory

Absorption trenches:
Square ft. required depth from ground surface
to bottom of trench aggregate size
Trench bottom slope
center to center spacing trench width
Depth of aggregate

Absorption trenches: yes ☐ no ☐ comments
Satisfactory

Date Inspected and approved by:

A-6.4

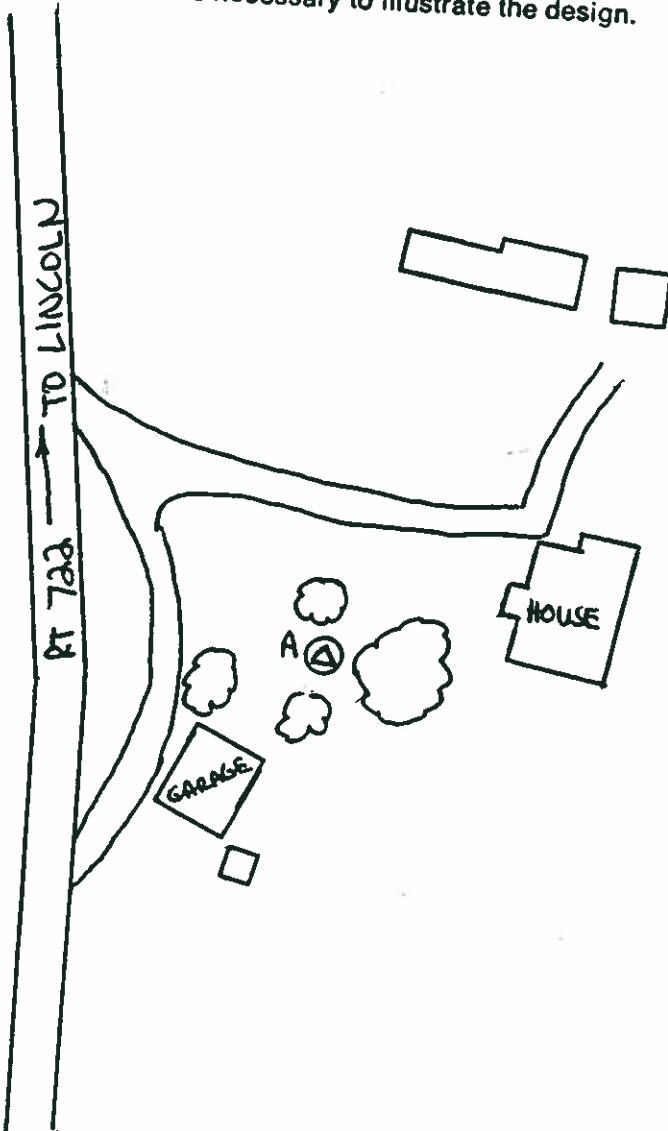
Schematic drawing of sewage disposal system and topographic features.

Permit Number 000 131 65 (Well)

PAGE 2 OF

Show the lot lines of the building lot and building site, sketch of property showing any topographic features which may impact on the design of the system, all existing and/or proposed structures including sewage disposal systems and wells within 100 feet of sewage disposal system and reserve area. The schematic drawing of the sewage disposal system shall show sewer lines, pretreatment unit, pump station, conveyance system, and subsurface soil absorption system, reserve area, etc. When a nonpublic drinking water supply is to be located on the same lot show all sources of pollution within 100 feet.

☐ The information required above has been drawn on the attached copy of the sketch submitted with the application. Attach additional sheets as necessary to illustrate the design.



A - CLASS II WELL SITE, NON-COMMUNITY PUBLIC WATER SUPPLY, TO BE LOCATED A MINIMUM OF FIFTY (50) FEET FROM BOTH THE HOUSE AND GARAGE, AS WELL AS, FIFTY (50) FEET FROM ANY OTHER SOURCE(S) OF POTENTIAL CONTAMINATION.

Sewage disposal system is to be constructed as specified by the permit ☐ or attached plans and specifications ☐. Sewage disposal system construction permit is null and void if (a) conditions are changed from those shown on the application (b) conditions changed from those shown on the construction permit.

of any installation shall be covered or used until inspected, corrections made if necessary, and approved, by the local health department expressly authorized by the local health dept. Any part of any installation which has been covered prior to approval shall be uncovered, upon the direction of the Department.

10/30/86 Issued by: Douglas A. Davis
 10/30/86 Reviewed by: [Signature] Sanitarian
[Signature] Supervisory Sanitarian

This Construction Permit Valid until 4/30/91

1A or VA financing
 1 by Date _____ Date _____
 Revised 6/84 Supervisory Sanitarian 11-2A Regional Sanitarian
 A-6.5

COMMONWEALTH OF VIRGINIA
WATER WELL COMPLETION REPORT

• 8WCM No. _____

State Water Control Board
P. O. Box 11143
2111 North Hamilton St.
Richmond, Va. 23230

(Certification of Completion/County Permit)

County/City Loudoun

County/City Stamp

• Virginia Plane Coordinates
527,300 N
2,228,200 E
Latitude & Longitude
N
W
• Topo. Map No. 215 C
• Elevation _____ ft.
• Formation _____
• Lithology _____
• River Basin _____
• Province _____
• Type Logs Drillers
• Cuttings _____
• Water Analysis _____
• Aquifer Test _____

• Owner Rogers Fones
• Well Designation or Number 659 FSW 85 (well)
Address 1422 N. Ivanhoe Street
Arlington, Va 22205
Phone 703-241-2294

• Drilling Contractor Valley Drilling Corp. of Va.
Address Rt. 1 Box 6K
Upperville, Va 22176
Phone 703-592-3239

Rt. 50 East turn left on Rt. 611 turn right on
WELL LOCATION: _____ (feet/miles) _____ (direction) of
Rt. 709 100 yds. on right after intersection of Rt. 709 & Rt. 722
and _____ (feet/miles) _____ (direction) of
(If possible please include map showing location marked)

Date started 7/14/87 • Date completed 7/14/87 Type rig Rotary

SWCB Permit _____
County Permit _____
Certification of inspecting official:
This well does _____ does not
meet code/flow requirements.
S. _____
Date _____
For Office Use

Tax Map I.D. No. 45/75
Subdivision _____
Section 45
Block _____
Lot 75
Class Well: I _____, IIA _____
IIB X, IIIA _____, IIIB _____
IIIC _____, IIID _____, IIIE _____

1. WELL DATA: New X Reworked _____ Deepened _____
• Total depth 165 ft.
• Depth to bedrock 20 ft.
• Hole size (Also include reamed zones)
• 10 inches from 0 to 61 ft.
• 6 inches from 61 to 165 ft.
• _____ inches from _____ to _____ ft.
• Casing size (I.D.) and material
• 6 inches from +1 to 60 ft.
Material Steel
Wt. per foot 13# or wall thickness .188 in.
• _____ inches from _____ to _____ ft.
Material _____
Wt. per foot _____ or wall thickness _____ in.
• _____ inches from _____ to _____ ft.
Material _____
Wt. per foot _____ or wall thickness _____ in.
• Screen size and mesh for each zone (where applicable)
• _____ inches from _____ to _____ ft.
• Mesh size _____ Type _____
• _____ inches from _____ to _____ ft.
• Mesh size _____ Type _____
• _____ inches from _____ to _____ ft.
• Mesh size _____ Type _____
• _____ inches from _____ to _____ ft.
• Mesh size _____ Type _____
• Gravel pack
• From _____ to _____ ft.
• From _____ to _____ ft.
• Grout
• From 0 to 50 ft. Type Cement
• From _____ to _____ ft. Type _____

2. WATER DATA • Water temperature 56°
• Static water level (unpumped level-measured) 19
• Stabilized measured pumping water level _____
• Stabilized yield 50 gpm at 21 ft.
Natural Flow: Yes _____ No X , flow rate _____ g
Comment on quality Clear
3. WATER ZONES: From _____ To 10gal 100'
From _____ To _____ From 20gal To 140'
From _____ To _____ From 20gal To 150'
4. USE DATA:
Type of use: Drinking X , Livestock Watering _____
Irrigation _____ Food processing _____ Household X
Manufacturing _____ Fire safety _____ Cleaning _____
Recreation _____ Aesthetic _____ Cooling or heating _____
Injection _____ Other _____
• Type of facility: Domestic X , Public water supply _____
Public institution _____ Farm _____ Industry _____
Commercial _____ Other _____
5. PUMP DATA: Type _____ • Rated H.P. _____
• Intake depth _____ • Capacity _____ at _____ head
6. WELLHEAD: Type well seal _____
Pressure tank _____ gal. , Loc. _____
Sample tap _____ , Measurement port _____
Well vent _____ , Pressure relief valve _____
Gate valve _____ , Check valve (when required) _____
Electrical disconnect switch on power supply _____
7. DISINFECTION: Well disinfected _____ yes _____ no
Date _____ , Disinfectant used _____
Amount _____ , Hours used _____
8. ABANDONMENT (where applicable) • yes _____ no _____
Casing pulled yes _____ no _____ not applicable
Plugging grout From _____ to _____ material _____

A-6.6

BWCM No. _____

10. DRILLERS LOG (use additional Sheets if necessary)

10. DRILLERS LOG (use additional Sheets if necessary)				11.	12. DIAGRAM OF WELL CONSTRUCTION (with dimensions)
DEPTH (feet)		TYPE OF ROCK OR SOIL	REMARKS	Drilling Time (Min.)	
From	To	(color, material, fossils, hardness, etc.)	(water, caving, cavities, broken, core, shot, (etc.)		
0	20	Overburden			
20	165	Bluestone			

13. Well lot dedicated? _____; Size _____ ft. X _____ ft.; Well house? _____
Distance to nearest pollutant source _____ ft.; Type _____
Distance to nearest property line _____ ft.; Building _____ ft.

14. WATER SERVICE PIPE: Checked under _____ p.s.i. for _____ minutes. Pipe size _____ inches, Material _____
Installer _____
Date _____

15. I certify that the information contained herein is true and correct and that this well and/or system has been installed and constructed in accordance with the requirements for well construction as specified in compliance with appropriate county or independent city ordinances and the laws and rules of the Commonwealth of Virginia.

Signature Haley D. Dyer (Seal), Date 7/15/87
(Well driller or authorized person) License No. W-103

**Valley Reg. Off.
116 North Main Street
P. O. Box 268
Bridgewater, Va. 22812
703-828-2595**

**Southwest Reg. Off.
408 East Main Street
P. O. Box 476
Abingdon, Va. 24210
703-628-5183**

**West Central Reg. Off.
Executive Park
5512 Peters Creek Road
Roanoke, Va. 24019
703 - 982 - 7432**

**Piedmont Reg. Off.
4010 West Broad Street
P. O. Box 6616
Richmond, Va. 23230
804-257-1006**

**Tidewater Reg. Off.
287 Pembroke Office Park
Suite 310 Pembroke No. 2
Va. Beach, Va. 23462
804-499-8742**

**Northern Virginia Reg. Off.
5515 Cherokee Avenue
Suite 404
Alexandria, Va. 22312
703-750-9111**

A-6.7

July 31, 1987

Philip B. Helm
Loudoun County Department
of Public Health
209 Gibson Street, N.W.
Leesburg, Virginia 22075

Re: Springdale Country Inn

Dear Mr. Helm,

This letter summarizes our discussion of July 30 that resulted in a modification of Springdale's septic field requirements from 2100 gallons per day (14,700 gallons per week) to 12,215 gallons per week (an average of 1745 gallons per day). The modification is based not on a reduction in the maximum occupancy of Springdale, but rather on the recognition that maximum occupancy (i.e., for seminars or special events) will not occur every day of the week. Accordingly, we are proposing a system based on a weekly rather than daily capacity. This methodology is like that described in your September 5, 1986 memo (copy attached) that approved 14,700 gallons per week (an average of 2100 per day) in lieu of 3,005 per day (21,035 gallons per week).

At the time the 14,700 per week capacity was approved in the Sept. 5, 1986 memo, Springdale's proposed maximum occupancy was 20 overnight guests and 79 day guests; currently the proposed maximum is 20 overnight guests and 30 day guests. Thus, we propose lowering the weekly septic capacity from 14,700 gallons to 12,215 gallons. The new figures break down as follows:


20 overnight guests x 60 gal.	= 1200 gal./day or 8400 gal./week
1 in-residence caretaker x 75 gal.	= 75 gal./day or 525 gal./week
2 owners at residence x 75 gal.	= 150 gal./day or 1050 gal./week
Subtotals	1425 gal./day or 9975 gal./week

Assuming 20 gallons per day, if 30 additional people were present every day, the needed daily capacity would increase by 600, to 2025 gallons. If calculated weekly, however, maximum occupancy of 30 day guests (requiring 600 extra gallons each time) could occur three times each week, and still be well below the 12,215 weekly capacity (i.e., $9975 + 1800 = 11,775$).

Because Springdale will not regularly be at capacity even twice a week, a weekly limit of 12,215 gallons can easily be adhered to. We therefore request approval of a septic system using drainfield areas II and III in the engineering study of July 7, 1987 prepared by Paul A. Henckin, a copy of which you have received.

Thank you for your time and consideration.

Sincerely,


Roger Fones Nancy Fones
Springdale Owners
Rt. 2, Box 356
Purcellville, Va. 22132

CC: Timothy J. Krawczel, Zoning Administrator

A-6.8

Sewage Disposal System Construction Permit

PAGE ____ OF ____

Commonwealth of Virginia
Department of Health



Health Department
Identification Number
Map Reference

Loudoun

Health Department

659 FS/85
45/75

General Information

New ☐ Repair ☐ Expanded ☒ Conditional ☐ FHA ☐ VA ☐ Case No. _____
Based on the application for a sewage disposal system construction permit filed in accordance with Section 3.13.01, a construction permit is hereby issued to:
Owner Roger W. Fones Telephone _____
Address 1722 N. Tuohoe St. Arlington, Va. 22205
For a Type II Sewage disposal system which is to be constructed on/at Rte 7, Swissman
Rte 722 (S) property on (L) South of Lincoln post first small bridge
Subdivision _____ Section/Block _____ Lot _____
Actual or estimated water use 12,215 gals/week

DESIGN

NOTE: INSPECTION RESULTS

Water supply, existing: (describe) Class II
Non-Community
To be installed: class _____
cased _____ grouted _____

Water supply location: Satisfactory yes ☐ no ☐ comments _____
G. W. 2 Received: yes ☐ no ☐ not applicable ☐

Building sewer: 4 I.D. PVC 40, or equivalent.
Slope 1.25" per 10' (minimum).
☐ Other _____

Building sewer: yes ☒ no ☐ comments _____
Satisfactory h/a 4-13-89 RT

Septic tank: Capacity Two 1875 gals. (minimum).
☐ Other in series

Pretreatment unit: S yes ☒ no ☐ comments _____
Satisfactory 4-13-89 RT

Inlet-outlet structure:
PVC 40, 4" tees or equivalent.
☐ Other _____

Inlet-outlet structure: yes ☐ no ☐ comments _____
Satisfactory 4-13-89 RT

Pump and pump station:
No ☐ Yes ☒ describe and show design.
if yes: See Attached Plans + Specifications

Pump & pump station: S yes ☐ no ☐ comments _____
Satisfactory 4-20-89 RT

Gravity mains: 3" or larger I.D., minimum 6" fall per 100', 1500 lb. crush strength or equivalent.
☐ Other _____

Conveyance method: yes ☒ no ☐ comments _____
Satisfactory pressure pipes 4-13-89 RT

Distribution box: Low Pressure Dist.
Precast concrete with _____ ports.
☐ Other _____

Distribution box: yes ☒ no ☐ comments _____
Satisfactory Valves 4-13-89 RT

Header lines:
Material: 4" I.D. 1500 lb. crush strength plastic or equivalent from distribution box to 2' into absorption trench.
Slope 2" minimum.
☐ Other _____

Header lines: pressure lines yes ☒ no ☐ comments _____
Satisfactory 4-13-89 RT

Percolation lines:
Gravity 4" plastic 1000 lb. per foot bearing load or equivalent, slope 2" 4" (min. max.) per 100'.
☐ Other _____

Percolation lines: yes ☒ no ☐ comments _____
Satisfactory

Absorption trenches: Utilizes Areas 2 + 3
Square ft. required _____; depth from ground surface to bottom of trench _____; aggregate size _____;
Trench bottom slope _____;
center to center spacing _____; trench width _____;
Depth of aggregate _____;
Trench length _____; Number of trenches _____

Absorption trenches: yes ☒ no ☐ comments _____
Satisfactory

Date 4-20-89 Inspected and approved by: J. Randall Monteburg
Sanitarian

A-6.9

Schematic drawing of sewage disposal system and topographic features.

PAGE ____ OF ____

Show the lot lines of the building lot and building site, sketch of property showing any topographic features which may impact on the design of the system, all existing and/or proposed structures including sewage disposal systems and wells within 100 feet of sewage disposal system and reserve area. The schematic drawing of the sewage disposal system shall show sewer lines, pretreatment unit, pump station, conveyance system, and subsurface soil absorption system, reserve area, etc. When a nonpublic drinking water supply is to be located on the same lot show all sources of pollution within 100 feet.

☐ The information required above has been drawn on the attached copy of the sketch submitted with the application. Attach additional sheets as necessary to illustrate the design.

For System Design + location See Attached Plans and Specifications

Utilize Areas Two and three For Installation

The sewage disposal system is to be constructed as specified by the permit ☐ or attached plans and specifications ☒.

This sewage disposal system construction permit is null and void if (a) conditions are changed from those shown on the application (b) conditions are changed from those shown on the construction permit.

No part of any installation shall be covered or used until inspected, corrections made if necessary, and approved, by the local health department or unless expressly authorized by the local health dept. Any part of any installation which has been covered prior to approval shall be uncovered, if necessary, upon the direction of the Department.

Date: Sept 15, 1987 Issued by: [Signature]

Sanitarian

Date: 13 OCT 87 Reviewed by: [Signature]

Supervisory Sanitarian

This Construction
Permit Valid until
SEP 15 1990
Mew

If FHA or VA financing

A-6.10

Reviewed by Date _____ Date _____

Supervisory Sanitarian

Regional Sanitarian

**DIVISION OF ENVIRONMENTAL HEALTH
LOUDOUN COUNTY HEALTH DEPARTMENT**
1 HARRISON ST. S.E./P.O. BOX 7000
LEESBURG, VA 20177
(703) 777-0234

*For Evaluation of Proposed
School Use of 118 students.
Special Exception Use.
Montessori Use for School*



EVALUATION REPORT (Must be accompanied by Application)

Property Address: 18348 Lincoln Road
Owner: Mary Jane Nordahl

Tax Map 45 (10) -2 Parcel # 455173739
Application # 770152040001

The opinions given are rendered without knowledge of some of the individual parts of the sewage disposal system and water supply and apply only to the date and time the opinions are made. Changes in the number of occupants and the amount of sewage being put into the system, lack of system maintenance, unusually wet weather, and age are among causes of system failure. The owner of any occupied property is required, by law, to maintain an approved, properly functioning water supply and sewage disposal system. We can not guarantee the future performance of the sewage disposal system and water supply.

(Noncommunity) *(Public water service not available)*
Water Supply: Public ☒ Private ☐ Public Water Available: Yes ☐ No ☒ Well Type: Drilled
Meets Min. Construction Stds: Yes ☒ No ☐ Unknown* ☐ If no, Explain _____
Sample Collected: Yes ☐ No ☒ Bacteriological Results: Satisfactory ☐ Unsatisfactory ☐
The Water Supply Systems Appears to be: Satisfactory ☐ Unsatisfactory ☐ Well Yield If Known 50 GPM

REMARKS: Public Non community well for the property. Office of Water must be contacted
*Wells developed prior to the 1976 adoption of the Loudoun County Well Water Ordinance may or may not meet current minimum requirements of 20' casing and 20' grout. Wells not developed in accordance with minimum requirements exhibit greater potential for surface water contamination.
for sampling and monitoring program requirements

Sewage Disposal System:

Public ☒ Private ☐ Public Sewer Available: Yes ☐ No ☒ Year System Installed 1989
Septic Tank and Dist. Box(es) Uncovered: Yes ☒ No ☐ If Yes, are they Satisfactory Yes ☒ No ☐
Is There An Effluent Pump System: Yes ☒ No ☐ If Yes, Is It Satisfactory Yes ☐ No ☐ Not Inspected ☒
Flow Diversion Valve: Yes ☐ No ☐ N/A ☒ Trees, Driveways, Swimming Pools, etc., Over System Yes ☐ No ☒
(Flow Diversion valve must be turned once a year)

Design Capacity (Per Available Records)

Existing Usage: Per Owner ☒ Per Inspection ☐

Number of Bedrooms 12, 215 gallons/week
Automatic Washer Yes ☒ No ☐
Garbage Disposal Yes ☒ No ☐

B
Yes ☒ No ☐
Yes ☒ No ☐

*Potential Use
would be
118 students*

Recommend pumping septic tank in 19 2010 and at 3 to 5 year intervals thereafter.

On The Date of The Evaluation

- ☒ Sewage disposal system appears to be functioning satisfactorily and with proper maintenance is not likely to create an unsanitary condition.
- ☐ Sewage disposal system appears to be functioning satisfactorily. However, based upon the above information the potential loading of the system is in excess of design and does not meet State and/or Local Regulations.
- ☐ Sewage Disposal System Appears to be Unsatisfactory and is Malfunctioning as Follows:
- ☐ Sewage Surfacing
 - ☐ Sewage (wastewater) Piped to Ground Surface
 - ☐ Sewage Backing Up in House Plumbing
- ☐ Other (See Remarks)

REMARKS: This office would highly recommend performing maintenance of the system including vacuuming of the laterals, etc. in the future.

Evaluation of the Water Supply System or Sewage Disposal System is Based on Health Department Records, Owner's Statements, and a Visual On-Site Inspection.

DATE OF EVALUATION 6/27/07

SANITARIAN Joseph E. Cook **A-6.11**

DATE OF REVIEW 6/28/07

SUPERVISOR John P. Zentgraf

DIVISION OF ENVIRONMENTAL HEALTH
LOUDOUN COUNTY HEALTH DEPARTMENT
P.O. BOX 7000
LEESBURG, VA 20177
(703) 777-0234



T70152040001

1165 WES07

APPLICATION

For Evaluation of existing water
and/or sewage disposal systems.

Department use only

Request # _____ Area #: _____

Fee () _____

Receipt number

Rec'd by _____ Date _____

Tax Map 45 (10) 2

PIN # 455-17-3739

PLEASE PRINT OR TYPE

NOTE: Make checks payable to: County of Loudoun

FOR SPECIAL EXEMPTION - PRE MONTESSORI PRE-SCHOOL /
ELEMENTARY SCHOOL

Proposed Settlement Date _____ Transfer? ☐ Refinance? ☐

Property Address 18348 LINCOLN ROAD

City PURCELLVILLE, VA 20132

Directions: TAKE ROUTE 7 W EXIT PURCELLVILLE, LEFT ON

Owner: BENNY & MARY JANE NORDAHL

Address: SAME AS ABOVE

Subdivision _____ Sec 45 (10) Lot 2

BECLINTURN PIKE RIGHT ON
MAIN ST, LEFT ON MAPLE AVE.
MAPLE TURN INTO LINCOLN ROAD
ABOUT 1.6 MILES HOUSE IS ON
LEFT SIDE

Phone: (H) 540-338-0275 CELL: 540-429-5995

Evaluation Requested by: MARY JANE NORDAHL

Phone: (H) _____ CELL: 540-338-0275 540-429-5995

Send Report to: MARY JANE NORDAHL

Address: 18348 LINCOLN ROAD, PURCELLVILLE, VA 20132

USE BACK OF THIS PAGE IF NECESSARY TO COMPLETE INFORMATION (Please Type or Clearly Print)

1 - Describe any history of a malfunction of the sewage disposal system (i.e. backup, pump malfunction, etc.) _____

NONE

2 - Date septic tank last pumped: MAY/07 3 - Number of bedrooms 8 4 - Approx. age of septic system 19 YEAR

5 - Is an automatic clothes washer or hook-up installed? YES 6 - Is there a garbage disposal installed? NO

7 - a. Has the dwelling been occupied under usual and customary waste load conditions for the past 30 days? YES

b. By how many people? 3 AD 4

8 - Is there discharge of laundry, kitchen, or other waste on top of the ground surface? NO If yes, explain: _____

9 - Dwelling is connected to: WELL ☒ PUBLIC WATER ☐ OTHER ☐ (Answer 10, 11 if well or other is checked)

10 - Describe any history of well problems (insufficient water, muddy water, etc.) NONE

11 - Circle any form of water treatment (pH control, filters, softening, iron, sulphur, chlorination, ultra-violet)

The following information must be supplied by the owner. (Complete all blanks.)

I CERTIFY THE INFORMATION ON THIS FORM WAS SUPPLIED BY THE OWNER AND IS CORRECT TO THE BEST OF MY KNOWLEDGE:

SIGNATURE Mary Jane Nordahl PRINT NAME MARY JANE NORDAHL H-612

OWNER ☒ AGENT ☐

NOTE: Please attach copy of listing if available from realtor and copies of any previous records on the water supply and sewage disposal system.



201

COMMONWEALTH of VIRGINIA

Environmental Engineering Field Office
400 S. Main St. 2nd Floor
Culpeper, VA 22701

*Department of Health
Office of Drinking Water*

Phone: (540) 829-7340
Fax: (540) 829-7337
www.vdh.virginia.gov

NOV - 6 2007

SUBJECT: Loudoun County
Water - Springdale Montessori School
PWSID No. 6107695

Jane Nordahl
Sprindale Montessori School
18348 Lincoln Road
Purcellville 20132

Dear Ms. Nordahl:

At your request, I visited your facility to review the existing waterworks equipment (i.e., well, hydropneumatic tanks, treatment system, etc.) in support of a request to use the existing building and waterworks for a preschool/elementary school with a maximum capacity of 118 students. This letter reviews the existing waterworks equipment in anticipation of this project.

Description of System

The water system consists of one drilled well, two diaphragm style pneumatic tank, softener, and distribution system. The water system currently serves a private home, but previously the facility was used as a Bed and Breakfast and the water system was a public water supply.

Well

One drilled well, 165 feet deep, is cased to a depth of 60 feet and grouted to a depth of 50 feet and was constructed on July 14, 1987. The steel casing is 6-inches nominal diameter, and weighs 19.18 pound/ft. The well yield is 50 gallons per minute based on a 2.5 hour test documented on the well completion statement. The submersible pump is set with intake at an unknown elevation and is rated at approximately 15 gpm at 120 feet of head. The well is equipped with a pitless adapter and an approved style sanitary seal well cap. The well has a one-foot casing extension.

Storage

The well discharges to two hydropneumatic tanks located in the basement of the house. The hydropneumatic tanks, 85 gallons nominal capacity each, approximately 57 gallons total effective capacity, are equipped with a pressure switch for control of the well pump. Additional appurtenances to the bladder tank include a pressure gauge.

Treatment

The storage tanks discharge through a water softener consisting of a birm filter for iron removal followed by a cation exchange bed with a capacity of 40,000 grains CaCO_3 . A brine tank capable of

SUBJECT: Loudoun County
Water - Springdale Montessori School
PWSID No. 6107695

holding 400 pound of sodium chloride is provided. The service flow is 10 gpm and the backwash flow is 7 gpm.

Capacity Evaluation

Source Capacity

Well yield and well pump capacity are calculated as follows, based on available information (to be confirmed):

Well Yield: $50 \text{ gpm} \times 1,440 \text{ min/day} = 72,000 \text{ gpd}$

Well pump capacity: $15 \text{ gpm} \times 1,440 \text{ min/day} = 21,600 \text{ gpd}$

Storage Capacity

The hydropneumatic tanks have a nominal capacity of 85 gallons each and a total usable capacity of 57 gallons. Noncommunity systems are exempt from the requirement to provide a specific amount of storage, provided that delivery capacity is adequate to meet peak hourly demand.

Treatment Capacity

Based on 10 gpm maximum service capacity with no bypass flow (as currently practiced), the treatment capacity is as follows:

$10 \text{ gpm} \times 1,440 \text{ min/day} = 14,400 \text{ gpd}$

Daily Demand

Based on 10 gpd per person annual average daily water consumption for an elementary school, 118 students and 15 staff the water demand would be:

$133 \text{ persons} \times 10 \text{ gpd/person} = 1,330 \text{ gpd}$

Based on eight hours of operation and a peak factor of 4, the estimated peak hourly demand would be:

$1,330 \text{ gpd} \times 1 \text{ day} / 8 \text{ hours} \times 4 = 665 \text{ gal/hr} = 11 \text{ gpm}$

Conclusion

Based on the above, the design capacity will be based on the capacity of the treatment unit, which is 10 gpm or 14,400 gpd. Note that according to the above calculations, the treatment unit is not sufficient to support the estimated peak hourly demand and some degradation of water quality and undesirably low pressures may result under the peak conditions.

Discussion

According to the well completion log, the well has a yield of 50 gpm. This test was likely completed shortly after completion of the well (July 1987). The available data suggests that the well pump is capable of approximately 15 gpm at 120 feet TDH. Based on our experience, the well yields reported by well drillers for a brief yield test run shortly after well was drilled usually are optimistic and overestimate the well yield as determined by a protocol acceptable to VDH ODW. Further, the well pump data provided is for the original pump installed in 1987, which most likely has been replaced. Therefore, we can't be sure of the capacity of the existing well pump. The well yield and pumping capacity must be confirmed by means of a 48-hour pumping test.

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Water - Springdale Montessori School
PWSID No. 6107695

According to our records, only nitrate/nitrate and coliform bacteria tests have been completed on the well, with the most recent test taken in 2003. A full round of developmental water tests are required to document the well's raw water quality. Required testing includes nitrate/nitrite, inorganics, metals, VOCs, cyanide, and SOCs. In addition, twenty (20) Most Probable Number (MPN) bacteria tests are required, to be taken hourly over the last 20 hours of the test.

The possibility of using the public water supply as a source of water for a hydrothermal heating system was discussed. Based on the information provided, water from the drinking water system would be passed through a heat exchanger and discharged to a stream passing through the site. The amount of water required was not identified. This water demand would need to be accounted for in the water system design prior to implementing this option. Note that the Virginia Department of Environmental Quality (DEQ), Northeast office, Mr. Thomas Faha, Water Permits Manager (703-583-3846) should be consulted regarding this project.

Recommendations

We recommend the following approach for preparing the waterworks to serve the Springdale Montessori School:

1. We are processing your request for a design exception for the well casing thickness and will notify you when we obtain feedback from our Central Office on this issue.
2. Conduct a pump test for at least 48 hours to confirm the yield of the well. Considering that 20 years have passed since the well was constructed, the yield of the well may have changed.
3. Collect a full round of water quality tests to document the water quality as part of the pump test.
4. Examine current well water quality data to determine if there are any water quality problems.
5. Estimate daily and peak hourly water usage.
6. Bring the waterworks into compliance with the current design and construction standards contained in the *Virginia Waterworks Regulations*. We have identified many of these issues in a sanitary survey inspection report that accompanies this letter.
7. Design waterworks equipment and appurtenances so that the system can meet the anticipated peak hourly demand.

The Way Forward

Prior to modifying the existing waterworks, you must obtain a construction permit. After receipt of the results of the chemical, radiological, physical, and bacteriological tests from the laboratory, plans and specifications, prepared by a Virginia Licensed Professional Engineer, for the well, storage and other appurtenances must be submitted to this office for review in accordance with 12 VAC 5-590-280, of the *Waterworks Regulations*. The plans and specifications should also include a copy of the well completion report and yield test results. We already have a copy of the recorded dedication document and plat for the well lot.

Upon receipt of the required information and documents, and after plans and specifications have been approved, a construction permit will be issued by the State Health Commissioner in accordance with 12 VAC 5-590-230 of the *Waterworks Regulations*. The construction of

A-6.15

Ms. Jane Nordahl
Page 4 of 4

SUBJECT: Loudoun County
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pumping, treatment, and storage facilities should not be started until the construction permit has been issued.

We look forward to working with you in this matter and providing technical assistance to help you comply with the Waterworks Regulations and incorporate good operating practices to protect public health.

Sincerely,



Robert D. Edelman, P.E.
District Engineer

RDE/tjb

CC: Loudoun County Health Department
ODW - Central

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A-6.16

PART V.
DESIGN AND CONSTRUCTION CRITERIA.

12VAC5-610-660. General.

The criteria contained in this section shall apply to all onsite sewage disposal systems. Deviations from these criteria may be considered by the district or local health department on a case-by-case basis.

12 VAC 5-610-670. Sewage flows.

Subsurface soil absorption systems shall be designed on the basis of the sewage flows tabulated in Table 5.1.

Table 5.1.
Sewage Flows.

Discharge Facility	Design Unit	Flow (gpd)	BOD (#/day)	S.S. (#/day)	Flow Duration (Hour)
Dwelling ¹	per person total	75	0.2	0.2	24
Food preparation		15			
Toilet facilities		20			
Bathing facilities		20			
Handwashing facilities		5			
Laundering		15			
Schools with shower and cafeteria	per person	16	0.04	0.04	8
Schools without showers and with or without cafeteria	per person	10	0.025	0.025	8
Boarding schools	per person	75	0.2	0.2	16
Motels at 65 gals/person (rooms only)	per person	130	0.26	0.26	24
Trailer courts	per person	75	0.2	0.2	24
Restaurants	per seat	50	0.2	0.2	16
Interstate or through highway restaurants	per seat	100-180	0.7	0.7	16
Interstate rest areas	per person	5	0.01	0.01	24
Service stations	per vehicle serviced	10	0.01	0.01	16
Factories & office buildings	per person per 8-hr shift	15-35	0.03-0.07	0.03-0.07	operating period
Shopping centers	per 1,000 sq. ft. of ultimate floor space	200-300	0.1	0.1	12
Hospitals	per bed	300	0.6	0.6	24
Nursing homes	per bed	200	0.3	0.3	24
Homes for the aged	per bed	100	0.2	0.2	24
Doctor's office in medical center	per 1,000 sq. ft.	500	0.1	0.1	12
Laundromats, 9 to 12# machines	per machine	500	0.3	0.03	16
Community colleges	per student and faculty	15	0.03	0.03	12
Swimming pools	per swimmer	10	0.001	0.001	12
Theaters, drive-in type	per car	5	0.01	0.01	4
Theaters, auditorium type	per seat	5	0.01	0.01	12
Picnic areas	per person	5	0.01	0.01	12
Camps, resort day and night with limited plumbing	per campsite	50	0.05	0.05	24
Luxury camps with flush toilets	per camp site	100	0.1	0.1	24
Dump station	per camp site	50	0.05	0.05	24

¹ For all dwelling units the design shall be based on two persons per bedroom.

CULPEPER ENGINEERING, P.C.
P.O. BOX 733
LOCUST GROVE, VIRGINIA 22508
PHONE: 540 423-9706
FAX: 540 423-1534

November 6, 2008

Jane & Benny Nordahl
18348 Lincoln Road
Purcellville, VA 20132

RE: Springdale Montessori School

Dear Mr. and Ma. Nordahl,

You had contacted me regarding the evaluated capacity of the existing well at Springdale and its ability to serve the proposed Montessori School. The proposed Montessori School water system is to be served by an existing 165' deep well located on the property. The source well was drilled by Valley Drilling Corp. of Virginia in 1987.

As requested by VDH a 24 hour pump/well capacity test was performed by Northern Virginia Drilling beginning at 9:40 AM on 6-3-08. A test pump was installed in the well for the 24 hour test. Prior to pumping a static level of 25' was recorded. Pumping was initiated at a rate of 15 gpm (reported capacity of owner's well pump) and a minimal drawdown (~12') was observed. At 4 PM the throttling valve was opened and the pump was allowed to operate continuously at 46 gpm through the end of the test. The well drawdown at 46 gpm was to 48.3'. This level was maintained through the end of the test. Following cessation of pumping (10 AM) on 6-4-08 the well recovered to 28.2' by 12:30 (2 ½ hours). The initial rate of recovery reported was 17' in the initial 30 minute period.

Based on the 24 hour test, the well can deliver a sustained production of 46 gpm. The well capacity at this rate equates to an hourly production of 2760 gallons. As you are aware, the installed pump has a lower production than the determined capacity of the well. A production capacity of 14 gpm at a system head of ~175 feet has been determined for the installed pump. The pumping capacity of 14 gpm is adequate to meet the demand estimated for the proposed school. At 14 gpm the installed pump is anticipated to minimally drawdown the level in the well. As noted above, Northern Virginia Drilling initially pumped the well at a rate of 15 gpm from 10:30 A.M. to 4:00 P.M. and only observed a drawdown of 12 feet. During this 5.5 hour period, the well delivered a total of 4950 gallons of water.

Based on the Waterworks Regulations, elementary schools without showers have a daily demand (design requirement) of 10 gallons per day per person. In the evaluation of your existing facilities, this design demand was utilized to evaluate the existing facilities. A daily demand of 1320 gallons per day may be assumed.

A-6.18

The following evaluation was detailed in the plans submittal to VDH regarding the proposed Montessori School.

Springdale Montessori School is re-establishing a Non-Community Water System located in Loudoun County. The water supply system is to serve a Montessori School with a projected student population of 117 children. Meal preparation is not proposed (no lunch to be provided by school) for the facility. The proposed schedule is currently for class (3 - 6 year olds) to be held from 9:30 AM to 12:30 PM. Additional enrichment classes will be available from 7:30 AM to 5:30 PM. It is projected that the preschool will include a maximum population of 90 and the elementary grades (up to 3rd grade) will include 27 students. Elementary classes are scheduled to start at 9:30 and end at 3:30 PM. Additional enrichment will be available for elementary students as well. The school plans to provide the enrichment programs for convenience (drop off/retrieval from 7:30 AM to 5:30 PM as necessary). As noted the school will not be preparing lunch. A snack (generally prepackaged) may be provided. It is noted that not all of the student population nor all of the projected staff would be in attendance during the entire day. To "worse case" peak hourly demand and peak daily demand to assure the water system can adequately meet all potential demands, a per person use of 10 gpd was assumed (not all will be onsite all day - some may elect to only attend the 9:30 - 12:30 preschool). A maximum daily demand of 1320 was used to evaluate the worse case day and verify available capacity.

The facility will be required to record use (water meter readings) once in operation. It is anticipated that the actual daily use may be closer to 5 gpd per person per day. The facility is not proposing to provide a cafeteria thus the primary school use will be associated with restroom use. Actual, metered use may be closer to 660 gallons per day, however the installed facilities have been determined to be capable of providing the "design criteria" of 10 gallons per person per day.

As noted above, at the determined production rate of 14 gpm, the well can deliver 840 gallons per hour. It is clear that the system can meet the "design criteria", daily demand of 1320 gallons per day.

You had noted the potential for a staff member to reside onsite. Based on the system evaluation, there is adequate capacity for this use (estimated to be 150 gpd) as well. As noted, the supply system can provide up to 840 gallons per hour. The total design demand of the school and residential unit (1470 gpd) can be satisfied. The resident staff would be utilizing water for personal use outside the hours of school use. It is also noted that the school will not impose system demand during weekends, holidays and summer vacation. There will be periods, of minimal system utilization.

In addition to evaluating the daily demand, the VDH submittal also predicted a "peak hour"

A peak hour may be determined - based on a potential 10 hour day the average hour is assumed to be 132 gallons. At 14 gpm the well can produce a total of 840 gallons. A peak factor of 4 would result in an hourly demand of up to 528 gallons. It is noted that the installed treatment has a rated service flow of 10 gpm or 600 gph. Based on the installed components the peak hourly and daily demand of the school as well as provide water supply for a resident staff member.

A-6.19

There are two 85 gallon bladders that provide pump control and also provide some storage capacity.

For your reference, it is noted that the proposed system is a non-community system and that use is not inclusive of normal demands associated with a "community" water supply system such as showering and laundry. When VDH evaluates a "community" water system they assume a daily demand of 400 gpd per equivalent residential connection (1 ERC= 400 gpd). If a system is to be supplied by a well, it is required that each ERC be provided with 0.5 gpm well capacity. It is thus evident that with a "well capacity" of 46 gpm the well at Springdale could have a potential of meeting the demand imposed by 2 X 46 or 92 ERC's. It is noted that a community system serving more than 50 connections would require a second source for reliability. So the well, as a sole source would be adequate for 49 ERC's (based on the reliability requirement) or a production of 19,600 gpd.

Please be assured that all of the quantity evaluation (yield testing provided) has verified that the existing well is adequate to meet your projected demand.

It is noted, for reference, that there is another Montessori school in Loudoun County. The operational history of water use at this facility has indicated that usage averages under 5 gallons per day per person at this facility. As noted above, the proposed system has an adequate capacity to meet the design requirement of 10 gpd/person and actual usage should be less than the design criteria.

If you have any questions or require any additional information, please do not hesitate to call.

Sincerely,



Rebecca S. Tolliver, P.E.

A-6.20

ATTACHMENT A-7

IV. CONDITIONS OF APPROVAL

(11/13/08)

1. The proposed Special Exception uses – a school and child care center - shall be developed in substantial conformance with the Special Exception Plat set, Sheets 1-3, dated July 2, 2007, sheets 1 and 2 revised through August 27, 2008 and sheet 3 revised through August 22, 2008 ("the Plat"); Exhibits A and B, dated June 6, 2008; Circulation Exhibit dated November 6, 2008; and the Revised Loudoun County Zoning Ordinance ("Zoning Ordinance"). Approval of this application does not relieve the Applicant of any Zoning Ordinance, Codified Ordinance, or any other requirement.
2. Definition of Student – For this application, each student calculated for the purposes of Condition (3.) shall be any one child enrolled in one or more programs (Enrichment, Primary, Elementary, etc.) for any part of any day of the operational week of the school and/or child care center. This definition does not supersede the School Board of State Department of Education definitions of a student.
3. Maximum # of Students Enrolled – There shall be no more than 117 students enrolled in the child care center and school at any one time. No more than 60 ~~90~~ students shall be enrolled and participate in activities that fall under the Zoning Ordinance definition of a child care center.
4. Maximum # of Employees – The maximum number of employees shall not exceed the number of employee parking spaces on the Property as approved by the Department of Building and Development.
5. Time of Year and Hours of Operation, School – The school use, as defined by the Zoning Ordinance, shall only operate between the hours of 9:30 AM and 3:30 PM, Monday through Friday, for a period of not more than 46 consecutive weeks each year, beginning with the first full week of September and concluding with the last full week in July. No students shall be on the property after 6:00 PM for activities related to the regular curriculum. Enrichment programs will be offered from 8:00 AM to 9:30 AM and from 3:30 PM to 5:30 PM.
6. Time of Year and Hours of Operation, Child Care Center – The child care center use, as defined by the Zoning Ordinance, shall operate between the hours of 7:30 AM and 5:30 PM, Monday through Friday for a period of not more than 46 consecutive weeks each year, beginning with the first full week of September and concluding with the last full week in July. No students shall be on the property after 6:00 PM for activities related to the regular curriculum. Enrichment programs will be offered from 8:00 AM to 9:30 AM and from 3:30 PM to 5:30 PM.
7. Maximum # of Children On Property - The maximum number of students on the premises at any one time, by curriculum category, shall not exceed the following:

Time Period	Maximum students on property	Program
8:00 – 9:30 a.m.	90	Morning Enrichment I, II, III
9:30 – 12:30 p.m.	117	Primary I, Primary II, Elementary I
12:30 – 5:30 p.m.	72	Primary II, Elementary I
5:30 – 6:00 p.m.	* late parents	

8. Parking Lot – The existing gravel parking lot, as delineated on the Special Exception plat of SPEX 1986-0009/SPEX 1986-0049 and now reflected on the Plat as noted in Condition (1.) of this application, shall be utilized in its' current state as a pervious gravel parking lot, notwithstanding improvements required by the Zoning Ordinance, Facilities Standards Manual, Codified Ordinance, or any other requirement.
9. Playground Equipment – The applicant shall not place any playground equipment or fill within the portion of the fenced-in playground that is in the minor floodplain, as identified on the Plat.
10. Playground Child Occupancy – The number of children occupying the outdoor playground area in the rear of the residence, as shown on the Plat, shall not exceed fifteen (15) during normal school and child care center operating hours as designated in conditions (5.) and (6.), respectively.
11. Tree Removal – The applicant shall consult with the County Forester at the time of site plan to determine appropriate clearing distances if any trees are deemed necessary to be removed.
12. Historic District Review Committee (HDRC) – Future exterior building alterations will be subject to the County's Historic District Review Guidelines.
13. Summer Programming – Any use of the property not during the programmed year operations per Conditions (5.) and (6.), shall not constitute a "summer camp", but rather be school instruction and child care similar to the proposed uses. Hours of operation shall adhere to those noted in Conditions (5.) and (6.) above; any summer programming shall not exceed a total of six (6) weeks in duration.
14. Private Events – Any private events occurring on the property, outside the function and operation of the school and child care center uses as conditioned herein, shall adhere to following:
 - a. Private events shall occur only Monday through Friday, and between 8:00 a.m. and 4:00 p.m.
 - b. All activities shall take place only within the main building.
 - c. Private events shall not take place while regular operation of either the child care center or school use is occurring.
 - d. During a private event, the maximum number of vehicles on the property shall not exceed the number of parking spaces shown on the approved site plan associated with the proposed child care center and school use.
 - e. No vehicles shall be parked on any grassed area of the property.
15. Use of Yard – Any outdoor activity related to the proposed child care center and school use shall only occur in the fenced-in playground area as shown on the Plat.
16. Elevator – If access from the proposed handicapped spot to the front of the house and the main entrance that meets all Americans With Disabilities Act (ADA) requirements cannot be

A-7.2

demonstrated at the time of site plan review, an elevator shall be provided that provides access from the elevation of the handicapped parking space to the first floor of the main building used for the proposed school and child care center use.

17. Lighting – If required by Chapter 7 of the Facilities Standards Manual, all exterior building and parking area lighting shall include shielded lighting fixtures so that light shall be directed inward and downward toward the interior of the property away from public roads and surrounding properties.
18. Stormwater Management – Water quantity and quality treatment shall be performed in accordance with the Facilities Standards Manual concurrent with the first construction plan or site plan submitted.

Note: The Applicant has agreed to provide a one time fire and rescue contribution to the County in the amount of \$0.10 per square foot of non-residential floor area construction for equal distribution between the primary fire and rescue servicing companies. This contribution shall be made at the time of issuance of the applicable zoning permits. This contribution shall escalate annually from the base year of 1988 and change effective each January 1st thereafter, based on the Consumer Price Index (CPI).

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SEVILA, SAUNDERS, HUDDLESTON & WHITE

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November 13, 2008

Mike Elabarger, Project Manager
Loudoun County Department of Planning
1 Harrison Street, SE, 3rd Floor
Leesburg, VA 20177



Re: Springdale Montessori School

Dear Mike:

This will confirm our telephone conversations this week regarding the parking circulation plan exhibit that has been submitted the parking spaces provided, total enrollment, number of classrooms, and total staff.

The circulation exhibit shows a total of 26 spaces; 23 in the parking lot, 2 in the garage, and 1 handicapped space near the main building. The parking calculations are based upon the proposed student enrollment of 117 students. The allocation of these students is 60 day care students and 57 K-3 school students. The parking calculations are based on Zoning Ordinance Section 5-1102. Under section 5-1102, Child Care Facilities, the Ordinance requires .2 parking spaces per person plus 1 space per employee. The Nordahls intend to have 60 child care students and 6 employees.

The calculations are as follows:

60 child care students =	12 parking spaces
6 employees =	<u>6 parking spaces</u>
Total:	18 parking spaces.

The calculations for school parking are also found in Section 5-1102. The Ordinance requires 1 parking space per classroom and other rooms used by the students, plus .2 parking spaces per driving age students. There are none. The Nordahls propose to have 4 classrooms, including rooms accessible to students.

ATTACHMENT A-8

A-8.1

The calculations are as follows:

4 rooms accessible to students = 4 parking spaces.

Total parking required as outlined above:

Childcare:	18 parking spaces
School	<u>4 parking spaces</u>
Total	22 parking spaces
Provided	26 parking spaces
Required	<u>22 parking spaces</u>
Extra	4 parking spaces.

The Nordahls have advised me that they hope to have as many as 12 staff members at full enrollment. Under these calculations and the parking spaces provided, there should be adequate parking at all times for 57 students and 12 staff members.

As we discussed over the telephone yesterday, it is the Nordahls' intention to have 2 rooms in the barn for the school (1 classroom and 1 room for study) and 2 additional rooms for the school in the main building. There may be additional rooms in the barn, but they would not be student accessible within the meaning of the parking requirements in the Zoning Ordinance.

To the extent anything above is inconsistent with previous responses, please consider this letter a revision to those responses.

Please let me know if you have any questions about the above. I look forward to hearing back from you.

Sincerely yours,



Robert E. Sevila

RES:slm
cc: Benny and Jane Nordahl

A-8.2